Tropicana Gold Mine (TGM)

TGM Threatened Species and Communities Management Plan

Issue No (version)	Status	Original prepared by	Issued to (description /section revised)	Date
V1	Final	AngloGold Ashanti Australia	OEPA (Original Management Strategy with PER)	September 2009
V2	Draft for Review	AngloGold Ashanti Australia/360 Environmental	DPaW	March 2014
V2	Final	AngloGold Ashanti Australia/360 Environmental	OEPA	December 2014
V3	Draft for Review	AngloGold Ashanti Australia	DBCA	December 2017
V3	Revision including DBCA feedback	Tropicana Joint Venture	Internally	December 2019
V4	Draft for review focussed on EPA Management Plan template	Tropicana Joint Venture	DWER/EPA DBCA	December 2021
V5	Table 2 and 3 and Appendix 2 and 3: update of classifications based on the 2023 data.	Tropicana Joint Venture	Internally	June 2023
V6	Inclusion of new threatened species including species from Mattiske 2020 and Kingfisher 2020 surveys	Tropicana Joint Venture	Internally	November 2023
V7	Table 2 and 3 and Appendix 2 and 3: update of classifications based on the 2024 data DWER RFI APP0025695 Updates	Tropicana Joint Venture	DWER/EPA and DBCA	January 2025

Endorsement

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Date: 07/11/2024

1 Executive Summary

Conditions 6.1 and 6.2 of Ministerial Statement 839 and condition 4 of EPBC Act Approval No. 2008/4270 requires the Tropicana Joint Venture (Tropicana JV) to implement and review its Threatened Species and Communities Management Strategy (TSCMS) for the Tropicana Gold Project (TGP).

Following consultation with the Department of Biodiversity, Conservation and Attractions (DBCA) and Department of Water and Environmental Regulation (DWER); DWER has provided guidance to use its management plan template for the next revision of the strategy. With this in mind, the Tropicana JV has critically revised the TSCMS to fit the structure and outcomes of DWER's management plan template and have renamed the TSCMS to the Threatened Species and Communities Management Plan (TSCMP).

For the intent of satisfying condition 6.1 of Ministerial Statement 839, the TSCMP should be regarded as the TSCMS.

The table below presents the summary and purpose of the TSCMP for the purposes of satisfying condition 6 of the Ministerial Statement 839.

Item	Description
Title of Proposal	Tropicana Gold Project
Proponent Name	Tropicana Joint Venture (AngloGold Ashanti Australia Limited and Independence Group NL)
Ministerial Statement Number	Ministerial Statement 839 EPBC Act approval 2008/4270
Purpose of the EMP	Minimise adverse impacts to conservation significant species and communities.
Key Environmental Factors and Objectives	Relevant Ecological Factors include: Flora and vegetation Terrestrial fauna
Condition Clauses	Ministerial Statement 839: Condition 6.1 The proponent shall implement the "Tropicana Gold Project Threatened Species and Communities Management Strategy, Version 2.0, Author: B Bastow, Issue Date: July 2009", or subsequent revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority. The objective of this strategy is to minimise adverse impacts to conservation significant species and communities. Ministerial Statement 839: Condition 6.2 The proponent shall review and revise the Tropicana Gold Project Threatened Species and Communities Management Strategy referred to in 6.1, in consultation with the Department of Environment and Conservation, every three years to ensure that the mitigation and management techniques remain valid and incorporate any relevant new research. EPBC Act Approval 2008/4270: Condition 4 The proponent must implement the "Tropicana Gold Project Threatened Species and Communities Management Strategy Version 3.0, September 2009", or subsequent revisions approved by the WA EPA. The proponent must provide the Department with the revised strategy within 14 days of approval by the WA EPA.

Item	Description
Key Provisions in the Plan	No loss of Threatened or other conservation significant flora, fauna or fauna habitat attributable to mining activities No new weed species shall establish in rehabilitation areas Weed coverage in rehabilitation no greater than average of three reference sites Disturbance not more than 3,650 ha (the total disturbance was increased from 3,540 ha in Attachment 7 of MS839) Demarcation of Threatened or other conservation significant flora, fauna or fauna habitat locations within 50 m of disturbance areas Infrastructure designed to avoid known locations of conservation significant species, mapped habitat for Threatened fauna, and large Marble Gum trees with hollows where practicable Implement vehicle hygiene inspection programme Installation of fencing around the landfill and isolated turkeys nests Exploration drill holes to be capped immediately after completion Conduct annual review and update of status of conservation significant species and communities

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2 Context, Scope and Rationale

2.1 Proposal

The TGP comprises the Tropicana Gold Mine (TGM) and infrastructure to support the operation. Most infrastructure occurs within the project's Operational Area Development Envelope, with other infrastructure located in the Water Supply Area Development Envelope (hosting Process Water Supply Borefield in the Minigwal sub-basin) and the Infrastructure Development Envelope, which hosts the TGM access road, communications towers, and road maintenance infrastructure.

These activities are all approved under Ministerial Statement 839 and EPBC Act Approval 2008/4270.

Key features of the TGP include:

- Disturbance of not more than 3,650 ha (2,680 ha Operational Area; 300 ha Water Supply Area; 670 ha Infrastructure Area);
- Mining of up to four open pits, plus underground mining;
- Waste landforms occupying not more than 1,200 ha;
- A single cell tailings storage facility with possible in-pit tailings deposition.

In the time since original approvals for the TGP, the status of Threatened species and ecological communities has changed (and will continue to change) through improved information on species status (both upgrades and downgrades) and additional monitoring data. These have formed part of the latest update.

Figure 1: TGP Development Envelopes

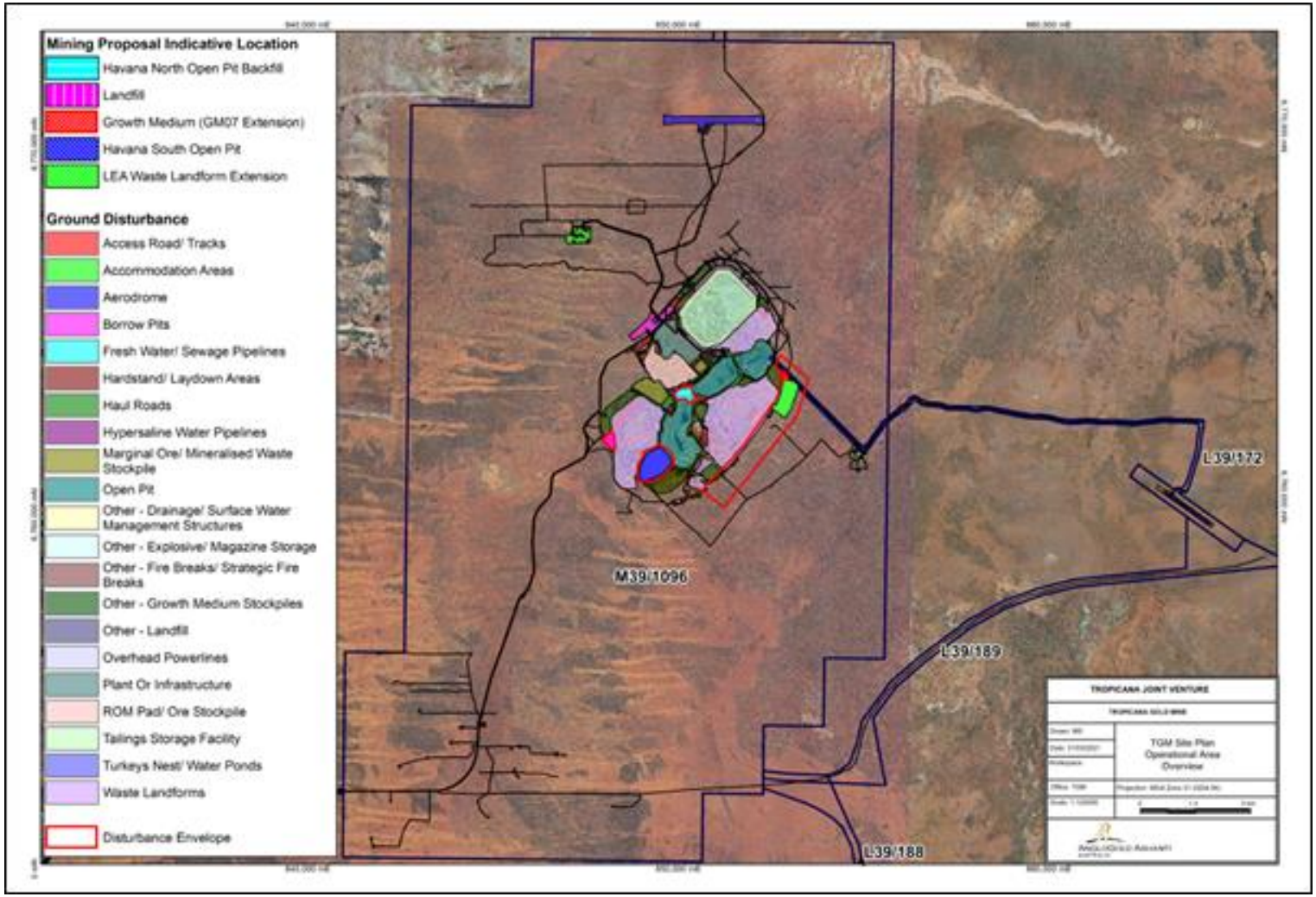

Figure 2: TGM Site Layout

2.2 Key Environmental Factors

The EPA determined there were five key environmental factors for the project which were subsequently assessed through the TGP Public Environmental Review (PER):

- Flora and vegetation;
- Terrestrial fauna;
- Subterranean fauna;
- Groundwater quality; and
- Rehabilitation and mine closure.

This TSCMP addresses the flora and vegetation, terrestrial fauna and subterranean fauna factors which are affected by the project activities described for each factor:

- Flora and vegetation – affected by disturbance for the mine and infrastructure;
- Terrestrial fauna - affected by disturbance for the mine and infrastructure and interaction with vehicles, development of trenches for pipelines, turkey nests and operation of a tailings storage facility (TSF).
- Subterranean fauna (troglofauna) – affected by direct habitat removal from mining and placing key infrastructure over the top of habitat such as waste landforms and TSF.

At the time of referral of the TGP (for 2008/4270) to the Commonwealth, the following Matters of National Environmental Significance were identified as present or likely to be present:

- Malleefowl – Vulnerable;
- Southern Marsupial Moles – Endangered;
- Sandhill Dunnart – Endangered (not recorded but suitable habitat present);
- Victoria Desert Smokebush (Conospermum toddii) – Endangered; and
- Rainbow Bee-eater – Migratory.

2.3 Condition Requirements

Specific conditions relating to Threatened and other conservation significant species and communities are described below. Those with outcome-based provisions are summarised in Table 1.

Table 1: Condition Requirements for the TSCMP under Ministerial Statement 839 and EPBC Act Approval 2008/4270

Instrument and Condition	Requirement	Section Addressed
Ministerial Statement 839 Condition 5.1	The proponent shall ensure that there is no loss of plants of Declared Rare Flora species due to construction or operational activities unless otherwise approved.	4.1 and 4.2
Ministerial Statement 839 Condition 6.1	The proponent shall implement the "Tropicana Gold Project Threatened Species and Communities Management Strategy, Version 2.0, Author: B Bastow, Issue Date: July 2009", or subsequent revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority. The objective of this strategy is to minimise adverse impacts to conservation significant species and communities.	Entire document
Ministerial Statement 839 Condition 6.2	The proponent shall review and revise the Tropicana Gold Project Threatened Species and Communities Management Strategy referred to in 6.1, in consultation with the Department of Environment and Conservation, every three years to ensure that the mitigation and management techniques remain valid and incorporate any relevant new research.	5 and 6

Instrument and Condition	Requirement	Section Addressed
Ministerial Statement 839 Condition 6.3	The proponent shall make the Tropicana Gold Project Threatened Species and Communities Management Strategy referred to in 6.1 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.	4.4
EPBC Act Approval 2008/4270 Condition 4	The proponent must implement the "Tropicana Gold Project Threatened Species and Communities Management Strategy Version 3.0, September 2009", or subsequent revisions approved by the WA EPA. The proponent must provide the Department with the revised strategy within 14 days of approval by the WA EPA.	5.2
EPBC Act Approval 2008/4270 Condition 5	If the Minister believes that it is necessary or desirable for the better protection of the Leipoa ocellata (Malleefowl), or other listed EPBC flora and fauna species to do so, the Minister may request that the proponent make specific revisions to the strategy referred to in condition 4, and submit the revised strategy for the Minister's approval. The proponent must comply with any such request. The revised approved strategy must be implemented. Unless the Minister has approved the revised strategy, the proponent must continue to implement the strategy referred to in condition 4.	Contingent only

2.4 Rationale and Approach

In clarifying the rationale for this management plan, it is noted there is a difference between the title of the TSCMP, the scope of EPBC Act approval 2008/4280 (Matters of National Environmental Significance) and the objective contained in condition 6.1 of Ministerial Statement 839 of objective of this strategy is to "minimise adverse impacts to conservation significant species and communities". To reconcile these differences, the TSCMP is focused on protecting the highest value flora and fauna values (Threatened flora, fauna, and ecological communities, listed Migratory and Other Specially Protected Fauna) as defined by the Biodiversity Conservation Act and/or EPBC Act. For the purposes of the TSCMP these are collectively described as Threatened flora, fauna and/or ecological communities.

At a lower level, are "other conservation significant flora, fauna and ecological communities" which are not afforded the same legal protections as Threatened species/communities. These constitute priority flora, fauna and ecological communities listed by the Department of Biodiversity Conservation and Attractions (DBCA). TGM adopts the same management strategies for other conservation significant species as those used for the protection of Threatened species and ecological communities with regards to managing and minimising impacts. This includes the priority flora, fauna and ecological communities listed by the Department of Biodiversity Conservation and Attractions (DBCA).

The objectives of the monitoring and management strategies, along with its approval conditions, aim to provide direction to TGM's operations, which include but is not limited to the following:

- Avoiding direct impacts to Declared Rare Flora; To ensure there is no loss of Declared Rare Flora species due to construction or operational activities unless otherwise approved. Controls used to avoid such impacts include Environmental and Heritage Inspection Notifications (EINs) to assess previously undisturbed land on AGA tenements for environmental significance and for the presence of potentially significant environmental receptors to exploration activities.

- Avoid impacts, significant or otherwise, to Threatened and Priority Ecological Communities with the objective of minimising adverse impacts to conservation significant species and ecological communities. Annual flora and fauna surveys are completed at TGM to ensure that operational activities are not having significant impacts on Threatened and Priority Ecological Communities around the operational area.

- TGM shall ensure that run-off and/or seepage from the tailings storage facility (TSF) and waste material landforms does not impact the quality of surface water or groundwater within or

adjacent to the disturbance area, nor exceed the trigger values as stated in the Environmental Operating Licence L8676/2012/1 for a slightly to moderately disturbed ecosystem of four metres below ground level.

2.4.1 Survey and Study Findings

Surveys conducted for the TGP PER identified several Threatened and other conservation significant species which are listed in Table 2 and Table 3. Since these studies, further work has been conducted at TGM as part of project modifications, monitoring commitments and site observations (due to the large number of studies, a complete list of TGP studies and key findings is presented in Appendix 1). In the wider regional context, the Great Victoria Desert Biodiversity Trust has also been active in conducting biological surveys within the Great Victoria Desert increasing the knowledge base of species distribution.

The status of Threatened and other conservation significant species has also changed (promotions and relegations) at both the Commonwealth and State level. The confluence of these factors has led to changes to Threatened and other conservation significant flora and fauna species present or considered likely to be present at TGM. The change in status is recorded within Table 2 and Table 3.

2.4.2 Conservation Significant Flora

At the time of the PER, there was one recorded Threatened flora species (Victoria Desert Smokebush - *Conospermum toddii*). Another Threatened species was also potentially present along the Infrastructure Development Envelope (Eucalyptus articulata - from the presence of mallees recovering after fire). Subsequent molecular assessment by Botanic Gardens and Parks Authority Service (2009) determined these mallees were not E. articulata.

Table 2 updates recorded Threatened and other conservation significant flora species across the TGP informed by a consolidation review undertaken by Mattiske Consulting Pty Ltd using baseline surveys and annual vegetation monitoring results. Changes to the species list since the previous TSCMS are illustrated in Appendix 2. Appendix 2 also outlines the methodology for updating the flora conservation values.

Based on the current conservation status, there is currently the possibility of one Threatened flora (Hibbertia crispula – Vulnerable) across the TGP, as well as 23 other conservation significant flora present as other conservation significant flora (Table 2).

Table 2: Conservation Significant Flora Recorded or Expected to Occur in and Around the Project's Development Envelopes

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2024)		Preferred Substrate
	Operational Area	Infrastructure Development Envelope	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Acacia eremophila numerous nerved variant	✓	-	-	P3	-	P3	-	Sandy soils and flats.
Acacia eremophila var. variabilis	✓	-	-	P3	-	P3	-	Sandy or sandy loam.
Alyogyne sp. Great Victoria Desert	-	✓	-	-	-	Delisted	-	Orange sand on flat plain (AOLA Occurrence Record Perth 9246541)
Baeckea sp. Sandstone	✓	-	-	P1	-	P3	-	Orange sand and flats.
Caesia Ridigifolia	-	-	-	-	-	P1	-	Located in a 2009 survey by Ecologica of the Madras area.
Caesia talingka now *Caesia* sp. Great Victoria Desert	✓	-	-	Undescribed	-	P2	-	Sand dunes.

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2024)		Preferred Substrate
	Operational Area	Infrastructure Development Envelope	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Calytrix warburtonensis	✓	-	-	-	-	P2	-	Rocky hills and breakaways.
Caustis deserti	-	-	-	-	-	P3	-	Madras survey area - Growing in Eucalyptus gongylocarpa isolated trees over m ixed shrubs and Triodia desertorum or T. basedowii open hum mock grassland on orange sand dunes.
Comesperma viscidulum	-	✓	-	P4	-	P4	-	Sandstone breakaway, red gritty sand, dune crest, swale, and rocky slopes.
Conospermum toddii	✓	✓	✓	T- DRF	EN	P4	-	Crests of sand dunes and in interdunal swales between the sand dunes.
Dampiera eriantha	✓	-	-	P1	-	P2	-	Yellow sand dunes.
Dicrastylis cundeeleensis	-	✓	✓	P3	-	P4	-	Yellow sand, red or reddish-yellow sand. Often found on sandplains.
Eremophila arachnoides subsp. Tenera	-	-	-	-	-	P3	-	Madra survey area - Sandy clay soil in the Casuarina pauper open woodland over

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2024)		Preferred Substrate
	Operational Area	Infrastructure Development Envelope	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
								Cratystylis subspinescens and mixed low shrubs and herbs vegetation association
Eucalyptus pimpiniana	-	✓	-	P3	-	P3	-	Red sand, sand dunes and plains.
Grevillea secunda	✓	✓	-	P2	-	P4	-	Yellow or red sand, sand dunes and sand plains.
Hibbertia crispula	-	✓	-	-	-	P1	VU	Was listed as endemic to south Australia but 5 reported sightings have been placed in the Great Victoria Desert.
Isotropis canescens	-	-	-	-	-	P2	-	Madras Survey Area - Mixed Eucalyptus low woodland over open shrubs and Triodia basedowii hummock grassland on a sand plain
Labichea eremaea	-	-	✓	P3		P3	-	Red sands
Lechenaultia aphylla	✓	-	-	-	-	P1	-	Red sand on slopes and drainage areas.

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2024)		Preferred Substrate
	Operational Area	Infrastructure Development Envelope	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Malleostemon sp. Officer Basin	✓	-	-	P2	-	P2	-	Yellow sand and dune slopes.
Micromyrtus serrulata	-	✓	-	P3	-	P3	-	Brownish sandy and clayey soils over granite.
Olearia arida	✓	✓	✓	P4	-	P4	-	Red or yellow sand and undulating low rises.
Thryptomene eremaea	-	✓	-	P2	-	P2	-	Red or yellow sand and sandplains.
Trachymene pyrophila	✓	-	-	-	-	P2	-	Yellow or orange sand. *T. pyrophila* is often found on sandplains; germinating after fire or other disturbances.
Vittadinia pustulata	✓	-	-	-	-	P3	-	Sandy red loam soils, in grasslands or disturbed sites

Species which are no longer recorded as Threatened or priority have been removed from the table.

2.4.3 Conservation Significant Fauna

At the time of the PER, two Threatened fauna species had been recorded in surveys (Southern Marsupial Mole and Malleefowl). The Sandhill Dunnart had not been recorded although suitable habitat was located. In addition, the Rainbow Bee-eater was also listed as a Matter of National Environmental Significance (Migratory species). Long abandoned nests (in breakaways) of the locally extinct Stick-nest Rat (Leporillus sp.) were also recorded.

Table 3 contains an updated list of Threatened, and other conservation significant fauna which have been recorded (formally or informally) or the Tropicana JV considers to be likely to occur within at least one of the TGP development envelopes through the presence of suitable habitat, changes in habitat distribution from lightning initiated regional fires and recent third-party records in the Great Victoria Desert. Changes to the species list since the previous TSCMS are illustrated in Appendix 3. Appendix 3 also outlines the methodology for updating the fauna conservation values.

The breeding season for conservation significant fauna species, as understood in 2010, were identified and are in Appendix 4. Monitoring and other activities will take into consideration the potential for species breeding seasons and if practicable will avoid the peak breeding season and key habitats.

Based on current knowledge, Threatened species present or believed to be present in at least one of the TGP's development envelopes are:

- Night Parrot (Critically Endangered (DBCA) and Endangered (EPBC));
- Sandhill Dunnart (Endangered);
- Malleefowl (Vulnerable);
- Princess Parrot (Vulnerable (EPBC));
- Great Desert Skink (Vulnerable);
- Grey Falcon (Vulnerable);
- Southern Whiteface (Vulnerable (EPBC))
- Peregrine Falcon (Other Specially Protected);
- Common Greenshank (Migratory);
- Fork-tailed Swift (Migratory);
- Oriental Plover (Migratory); and
- Wood Sand-piper (Migratory).

Of these, the migratory species and falcons are expected to be vagrants only, either exploiting opportunistic conditions in the region (e.g., migratory species following passage of cyclones) or occupying very large ranges of aerial habitat (falcons). This leaves the key Threatened species from a management perspective being the Sandhill Dunnart, Night Parrot, Malleefowl, Princess Parrot, Great Desert Skink, Grey Falcon and the Southern Whiteface.

Table 3: Conservation Significant Fauna Recorded or Expected to Occur in and around the Project's Development Envelope

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2024)		Habitat Notes
	Operational Area	Infrastructure Development Envelope	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Central Long-eared Bat - *Nyctophilus major tor.* (previously *N. timoriensis*)	✓	-	-	P4	-	P3	-	Often found in heavy Eucalypt woodlands and tall woodlands of the Coolgardie IBRA region with a tall shrub understorey of *Melaleuca lanceolata, M. pauperiflora, M. quadrifaria*, and *Eremophila* sp., *N. timoriensis* is less common in open woodlands.
Mulgara - Brush-tailed *Dasycercus blythi*	✓	-	✓	S4	-	P4	-	The main vegetation in inhabited areas, specifically *Triodia basedowii,* provides refuge from the heat and cover for the entrance to their burrows. Mulgara live in burrows which they dig on the flats between low sand-dunes or on the lower edges of dunes.
Sandhill Dunnart - *Sminthopsis psammophila*	✓	-	✓	S1	EN	EN	EN	Sandhill Dunnarts prefer sandy soils, typically low parallel sand dune habitat with a diverse understorey and a ground cover of Spinifex (*Triodia*). Spinifex size is variable in preferred habitat; dunnarts show a preference for large hummocks approximately 40 cm high and 70 - 100 cm diameter as nest sites. Other vegetation in preferred habitats varies but is most commonly Mallee or Marble Gum (*Eucalyptus gongylocarpa*), often with *Callitris verrucosa* and a complex shrub understorey.

Southern Marsupial Mole - *Notoryctes typhlops*	✓	-	✓	P1	EN	P4	Delisted	SMM inhabits Spinifex dominated sand dune and sand plain country. The sand in these regions tends to be loose and free of gravels. The SMM appears to have a preference for substrate with compactness at the level of <10 drops per 150 mm to a depth of at least 450 mm when measured using a penetrometer.
Grey Falcon - *Falco hypoleucos*	-	✓	-	P4	-	VU	VU	Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast. They also occur near wetlands where the surface water attracts the prey. Likely to occur at times as a vagrant.
Malleefowl - *Leipoa ocellata*	✓	✓	✓	S1	VU	VU	VU	Found principally in semi-arid to arid shrublands, low woodlands dominated by mallee and associated habitats such as Broombush (*Melaleuca uncinata)*. In the GVD, Malleefowl appear to prefer the smaller desert-mulga *Acacia minyura*. Studies have shown that the birds use vegetation adjacent sand plain areas for foraging where food resources are more common. The birds also occur in denser Mallee (*E. socialis, E. oxymitra,* and *E. gammophylla*). Typically, these Mallee areas have an understorey of *Triodia basedowii* or other *Triodia* species, and shrub thickets on the ridges where *Acacia ligulata* and other seed bearing shrubs are often common.
Naretha Blue Bonnet - *Northiella*	-	-	-	S4	-	P4	-	Usually found in or within sight of *Casuarina* and *Acacia* woodland, and usually near shrubland. They are often found far from water. The Naretha

haematogaster narethae								Blue Bonnet moves seasonally with the rains. Its presence is expected to be as a vagrant.
Peregrine Falcon - *Falco peregrinus*	✓	-	-	S4	-	OS	-	The species prefers habitat with rocky ledges, cliffs, watercourses, open woodland or margins with cleared land. Whilst recorded its presence is expected to be as a vagrant.
Striated Grass wren - *Amytornis striatus*	✓	-	-	P4	-	P4	-	This subspecies of Striated Grasswren inhabits Spinifex on sandhills and rocky hillslopes and may occur in the survey area. The species' presence is strongly correlated with vegetation communities that support hummock grassland (*Triodia* sp.).
Western Grasswren (western sp) - *Amytornis textilis*	-	-	-	P4	-	P4	-	The Thick-billed Grasswren now known as the Western Grasswren was found in areas of 'thick bush' or 'thickets', dense Saltbush, in 'marlock' or low Mallee scrub and in 'large clumps of bushes which had extremely dense masses of foliage.
Princess Parrot Alexandra's Parrot- *Polytelis alexandrae*	-	-	-	S1	VU	P4	VU	The Princess Parrot usually occupies swales between sand dunes and is occasionally seen on slopes and crests of dunes. This habitat consists mostly of shrubs such as *Eremophila, Grevillea*, and Hakea and scattered trees. Some records are from riverine forest, woodland and shrubland. Breeding takes place in hollows in large Eucalypts, particularly River Red Gums *E. camaldulensis*, and also in Desert Oaks *Allocasuarina decaisneana.*

								Whilst it has yet to be recorded, its presence is most likely to be near large Marble Gum trees with hollows.
Common Greenshank - *Tringa nebularia*	-	✓	-	IA	MI	MI	MI	The Common Greenshank is typical of well-watered regions; casual or vagrant on west-coast islands and in the arid east. Whilst recorded, its presence is expected to be as a vagrant during favourable conditions.
Fork-tailed Swift also known as the Pacific Swift - *Apus pacificus*	✓	-	-	IA	MI	MI	MI	Aerial: over open country, from semi-deserts to coasts, islands; sometimes over forests, cities. Whilst recorded, its presence is expected to be as a vagrant during favourable conditions.
Oriental Plover, Oriental Dotterel - *Charadrius veredus*	-	-	-	-	MI	MI	MI	Open plains, bare, rolling country, often far from water, ploughed land; muddy or sandy wastes near inland swamps or tidal mudflats; bare claypans; margins of coastal marshes; grassy airfields, sportsfields, lawns. Its presence is expected to be as a vagrant during favourable conditions.
Wood Sandpiper - *Tringa glareola*	-	✓	-	-	MI	MI	MI	The Wood Sandpiper is typical of well-watered regions, particularly coastal plains and plains about lower courses of larger rivers. Whilst recorded, its presence is expected to be as a vagrant during favourable conditions.
Great Desert Skink - *Liopholis kintorei*	✓	✓	-	S1	VU	VU	VU	The species generally occurs on red sand plains and sand ridges and they generally prefer spinifex (Triodia species and Plectrachne species), grassland sand plains and some adjacent dune

(Egernia kintorei)								field swales. Regenerating vegetation appears to be a critical habitat requirement. Skinks appear to prefer a mosaic landscape of different aged vegetation and inhabit sites that have been burnt in the previous 3-15 years. Preferred habitat has at least 50% bare ground.
Dotty-Tailed Robust Slider- *Lerista puncticauda*	-	-	-	P2	-	P2	-	*Lerista puncticauda* prefers arid shrub-lands; sandridges vegetated with Marble Gums and *Triodia basedowii*. Kingfisher (2020) also adds that the preferred habitat would be woodland/mallee. Local recordings (within 120km) Queen V.Spring.
Woma Python - *Aspidites ramsayi*	✓	-	✓	P1	-	P1	-	The Woma Python is generally found in sandy arid habitats including desert sand hills and dunes as well in a variety of other subtropical, temperate, arid and semi-arid regions. Generally, Woma Pythons are strongly associated with red desert and Spinifex.
Southern Whiteface (*Aphelocephala leucopsis*)	✓*	✓*	✓*	-	-	-	VU	Dry open forest and woodland and inland scrubs of mallee, mulga and slatbush are the preferred habitat of the Southern Whiteface, especially areas with fallen timber or dead trees and stumps.
Curlew Sandpiper (*Calidris ferruginea*)	✓*	✓*	✓*	-	-	CR	CR	Mostly found on intertidal mudflats of estuaries, lagoons and mangroves, as well as beaches, rocky shores and around salt lakes. It has been located inland Australia in suitable habitats.

Night Parrot (*Pezoporus occidentalis*)	-	-	-	-	-	CR	EN	Spinifex and Chenopod. No local records within 120km (Kingfisher, 2020).
Buff-snouted Blind Snake	-	-	-	-	-	P2	-	Salt Lakes and Sandplains. Local record within 120km at Neale Junction Nature Reserve.
Long-tailed Dunnart	-	✓	-	-	-	P4	-	Exposed rock and stony soils with hummock grasses and shrubs. Flat-topped hills, lateritic plateaus, sandstone ranges and breakaways. Sparse mulga over spinifex.

*Based on the search area of the IUCN red list

Species which are no longer recorded as Threatened or priority have been removed from the table.

2.4.4 Ecological Communities

Flora and vegetation surveys conducted for the PER did not identify the presence of Threatened Ecological Communities (TECs) within any of the development envelopes. However, areas of vegetation in the Operational Area and Infrastructure Development Envelope were noted as having possible similarities to the Priority 3 (ii) ecological community (PEC) 'Yellow sandplain communities of the Great Victoria Desert'. At the time, detailed descriptions and complete regional boundaries of the PEC were not available. Thus, it was concluded the Operational Area was likely outside the PEC, but peripheral areas of the PEC may be intersected by the Infrastructure Development Envelope.

In 2016, the EPA published a full boundary of the PEC in the Mulga Rocks Uranium Project Report and Recommendations of the Environmental Protection Authority (EPA 2016). The PEC was defined to occur over 1,692,000 ha. Whilst the PEC does not overlap the Operational Area development envelope, it does intersect substantial parts of the Infrastructure Development Envelope. More recently, the PEC has been renamed as "Yellow sandplain vegetation of the Great Victoria Desert with diverse vertebrate fauna."

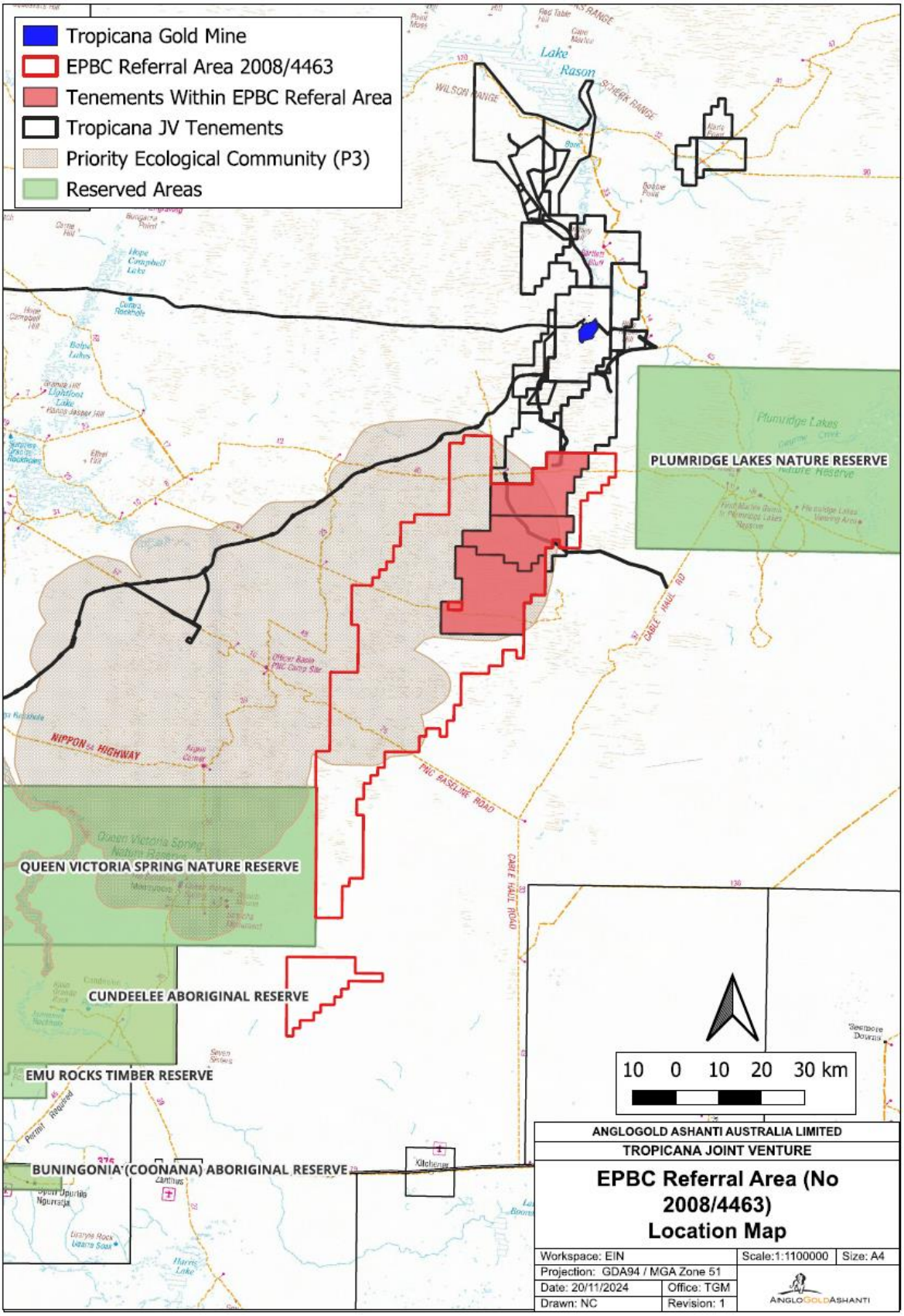

Figure 3: Boundary of the Yellow sandplain vegetation of the Great Victoria Desert with diverse vertebrate fauna Priority Ecological Community

3 Key Assumptions and Uncertainties

3.1 Assumptions

It is assumed measures to avoid direct disturbance to areas of known presence or mapped habitat for Threatened species and minimising overall disturbance footprints will have the greatest effect on minimising impacts to Threatened and conservation significant species.

Surveys conducted to date provide sufficient coverage of the ranges of vegetation associations and habitats to identify most Threatened and conservation significant species. Achieving 100% coverage of the biological inventory is unrealistic but the scope for new identifying new Threatened or conservation significant species considered unlikely to occur in the area is diminished.

Survey methods and techniques used for baseline and subsequent studies were effective and considered leading practise at the time.

In this update several fauna species have been included as likely to be present (as opposed to records of presence only). This decision has been informed from other work outside of the TGP development envelopes where records have been made, the presence of suitable unburnt habitat. As a result, there is no impediment for such species being within a TGP development envelope as part of their wider distribution. This assumption is also an uncertainty.

The Tropicana JV's prioritisation of minimising impacts to mapped habitat and remnant unburnt vegetation will have higher conservation outcomes than vegetation which has not been identified with particular values of conservation significance or has been recently burnt by lightning initiated fires.

Measures taken to protect Threatened fauna are also effective to protecting/minimising impacts to other conservation significant species. The exception to this is species dependent on or have life strategies which exploit fire.

3.2 Uncertainties

The passage of lightning initiated regional fires is a key uncertainty affecting the existence and distribution of flora and fauna species at any one time.

The intensity of survey effort closer to the main impact areas of the TGP, and in particular the Operational Area, does not mean the threatened and conservation significant species are concentrated around the TGP. Rather, reduced data density and low activity levels by TGM personnel in the regional areas mean a lower recording/observation of threatened and conservation significant species.

3.2.1 Management Approach

Management measures are required to ensure the project will not have a significant impact on Threatened species and ecological communities at the TGP.

In adopting the TSCMS to the EPA management plan template, several management strategies were obscure in how they could be implemented or measured. This has required critical revision of strategies to reconcile more clearly with the objective they are trying to achieve.

Whilst the TSCMP is a standalone plan for the purposes of Ministerial Statement 839 and EPBC Act approvals, it is supported in the background by TGM's Integrated Management System and in particular Biodiversity Management Plan, which not only captures the Tropicana JV's commitments to Threatened species and ecological communities but also addresses the Tropicana JV's corporate biodiversity commitments.
Potential impacts to Threatened and other conservation significant species and ecological communities include:

- Direct loss of conservation significant species and ecological communities from disturbance activities;
- Direct loss of habitat for conservations significant species; and
- Indirect loss from weed infestation/competition.
- Indirect loss from feral animal predation.

- Indirect loss from use of saline groundwater.
- Indirect loss by entrapment of conservation significant fauna in trenches, turkeys nests or the TSF.
- Indirect loss from decline in vegetation and habitat due to dust generation.
- Indirect loss from artificial changes to fire regimes.
- Direct loss from interactions between conservation significant fauna vehicles travelling along roads.
- Indirect loss to habitat from hydrocarbons and chemicals.
- Indirect loss to vegetation and habitat from contact with saline water.

Management of Threatened and other conservation significant species and ecological communities at the TGP is based on the hierarchy of:

- Avoidance;
- Impact minimisation; and
- Remediation/rehabilitation.

3.3 Avoidance

The primary management approach to avoid impacts to Threatened species and ecological communities or their habitat and other conservation significant species and ecological communities is to avoid direct disturbance through the Tropicana JV's Ground Disturbance Permit process. By following this process, the only impacts to Threatened species and ecological communities are those which have been assessed under Part IV of the Environmental Protection Act and EPBC Act.

3.4 Minimising Impact

When planning for development of the TGP during the approvals phase, some impacts were unavoidable which included disturbance to sand dunes (habitat for the Southern Marsupial Mole and a number of other conservation significant flora species), habitat for Malleefowl and Sandhill Dunnarts. However, with the benefit of baseline data and planning of activities, direct impacts were minimised to those required to develop the project.

Indirect impacts may not be entirely preventable and so provisions are applied to reduce or minimise the likelihood of their occurrence. In some cases, effective management controls can prevent occurrence, whilst in others management controls may reduce the extent of an indirect impact.

Remediation or Rehabilitation of Residual Impacts

The primary impact to the Threatened and conservation significant species and ecological communities and their habitat is direct disturbance. Whilst impacts can be minimised, conducting remediation or rehabilitation can diminish the extent of impact or at least re-establish the environment to a point where it encourages return of species.

3.4.1 Rationale for Choice of Provisions

The mitigation hierarchy described above recognises avoidance of an impact is always preferable over minimising an impact. However, where impacts can't be avoided, or occur, remediation or rehabilitation provides the best opportunity for minimising the duration of and mitigating the extent of the impact.

Over the 3,650 ha identified for impact, most is expected to be of high intensity with an operational life of 15 years extending to 25 years when including the closure and rehabilitation phase. However, the magnitude of the project's impact in the context of the Great Victoria Desert is small. For example, the total Southern Marsupial Mole habitat impact was assessed to be approximately 15 km of dune out of an estimated 14,000 km of dune north of the Operational Area (representing less than 0.15% of this habitat and less than 0.01% of the available habitat for Southern Marsupial Mole in the Great Victoria Desert).

Similarly, surveys found evidence of 14 inactive Malleefowl mounds in the Operational Area. Modifications to the project avoided all Malleefowl mounds except for one inactive mound in the

Operational Area (coinciding with location of open pits). Disturbance to some mapped habitat for conservation significant fauna, including Malleefowl and Sandhill Dunnart was approved for development of the project.

Fire is the principal influence on conservation significant species (mostly negative, but for some species like *Trachymene pyrophila* fire is a positive influence). Remnant unburnt vegetation following the passage of several lightning initiated regional fires have increased the value as refuge habitat.

Therefore, key management provisions in the TSCMP are focussed on avoiding or minimising direct disturbance to habitat for conservation significant species and remnant unburnt vegetation.

4 Management Plan Provisions

The primary objective of the TSCMP "is to minimise adverse impacts to conservation significant species and ecological communities". Whilst the term "minimise adverse impacts" and much of the language in previous versions of the TSCMS is geared towards management-based provisions, there are several outcome-based provisions which are applicable to the TSCMP.

4.1 Outcome Based Provisions

Using the EPA's guidance, outcome-based provisions are clear unambiguous (shall/must/maintain) criteria used for determining an outcome. Whilst these were not previously part of the TSCMS, they are explicitly stated in Ministerial Statement 839.

Table 4: Outcomes Based Provisions

	EPA Factor: Threatened and other conservational significant flora, fauna and ecological communities. **Objective/s:** **1. Avoid loss of Declared Rare Flora species** **2. Minimise adverse impacts to conservation significant species and ecological communities** **Key Environmental Values: Threatened and other conservational significant flora and fauna populations and ecological communities** **Key impacts and risks: Negative impact to Threatened and other conservational significant flora and fauna populations and ecological communities**

Outcome-based				
• **Trigger criteria** • **Threshold criteria**	**Response actions:** • **Trigger level actions** • **Threshold contingency actions**	**Monitoring**	**Timing / frequency of monitoring**	**Reporting**
5.1 The proponent shall ensure that there is no loss of plants of Declared Rare Flora species due to construction or operational activities unless otherwise approved				
Trigger Criteria – All proposed clearing requires an internal approval from the Environmental Department. **Threshold Criteria** - Loss of 1 or more plants of a Declared Rare Flora species without prior approval.	**Trigger level actions -** All clearing programs within M39/1096 that aren't related toexploration activities to obtain a Ground Disturbance Permit (GDP) approval prior to clearing and all Exploration clearing within the TGP area to obtain an Environment and Heritage Inspection Notification (EIN) approval prior to clearing. If Declared Rare Flora are located during the internal approvals the program is to be amended to avoid these species. If the area doesn't have sufficient baseline data further surveys will be undertaken. Justification – internal approval applications for any clearing (GDP or EIN) trigger a review (including spatial flora survey data and field inspections) by the Environmental Department. Where DRF species are identified in or within close proximity to the proposed program appropriate controls are implemented to ensure that the proposed program will not negatively affect any DRF.	**Indicators:** Declared Rare Flora Pre-disturbance GDP and EIN Post clearing disturbance reconciliation	GDPs and EINs must be approved prior to clearing programs being undertaken. Annual Aerial Imagery flyover undertaken around the start of September with the reconciliation of clearing undertaken in November	External: CAR report Regulatory notification – if excursion occurred Internal: Incident reports GDPs and EINs

Outcome-based				
• Trigger criteria • Threshold criteria	Response actions: • Trigger level actions • Threshold contingency actions	Monitoring	Timing / frequency of monitoring	Reporting
	Threshold contingency actions - Stop the incident/activity from continuing to have impact. Notify DWER, DBCA and DAWE. Determine if any individuals within population affected can be saved and mark off to prevent further disturbance. In consultation with DBCA determine if there is any salvageable material for future propagation (including authorisation to take if salvage is practicable). Review other populations to determine if any are suitable for collection of propagules. Obtain authorisation to take prior to harvesting propagules. Conduct propagation/seeding in other suitable areas to achieve no nett loss of individuals. Investigate the incident and report to DWER, DBCA and DAWE Review which management strategy/ies failed and make changes Justification – baseline studies were undertaken as a part of the section 38 Public Environmental Review (PER). Comments from the public and relevant regulator feedback were considered in the development of the original Threatened Species and Communities Management Strategy.			
6.1 The proponent shall implement the "Tropicana Gold Project Threatened Species and Ecological Communities Management Strategy, Version 2.0, Author: B Bastow, Issue Date: July 2009", or subsequent revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority. The objective of this strategy is to minimise adverse impacts to conservation significant species and ecological communities.				
Trigger Criteria – All proposed clearing requires an internal approval from	**Trigger level actions -** All clearing programs close to the mine to obtain a GDP approval prior to clearing and all Exploration clearing to obtain an EIN approval prior to clearing.	**Indicators**: Threatened and other conservation significant species	GDPs and EINs must be approved prior to clearing programs being undertaken.	External: CAR report

Outcome-based				
• **Trigger criteria** • **Threshold criteria**	**Response actions:** • **Trigger level actions** • **Threshold contingency actions**	**Monitoring**	**Timing / frequency of monitoring**	**Reporting**
the Environmental Department. **Threshold Criteria** – No exceedance of the Non-exploration disturbance of - 2,680 ha Operational Area 300 ha Water Supply Area 670 ha Infrastructure Corridor	If Threatened or other conservation significant flora, fauna and ecological communities are located during the internal approvals process the program is to be amended to minimise impact to these species. Justification - triggering the internal approval process allows the Environmental Department to review the spatial flora, fauna, PEC data, approved disturbance limits and undertake a field inspections (where significant species are located within close proximity to the proposed program), to ensure impacts to any threatened or conservation significant species and ecological communities from clearing is minimised. **Threshold contingency actions** - Notify DWER Liaise with the AGAA Environmental Approvals Department to confirm if amendments to the approvals are required ahead of any clearing. Obtain further approvals if footprint exceeds or is planned to exceed Ministerial Statement disturbance limits. Justification – baseline studies were undertaken as a part of the section 38 PER. Comments from the public and relevant regulator feedback was considered in the development of the original Threatened Species and Communities Management Strategy.	and ecological communities Pre-disturbance GDP and EIN Post clearing disturbance reconciliation	Annual Aerial Imagery flyover undertaken around the start of September with the reconciliation of clearing undertaken in November	Regulatory Notification if excursion occurred Internal: Incident report GDPs and EINs

4.2 Management Based Provisions

Previous versions of the TSCMS have been derived from management-based provisions. To reconstruct the strategies within the TSCMS into the format of the EPA's management plan template the following general approach has been taken:

- Threats and/or Potential Impacts have been used to derive Management Objectives;
- Management Strategies have been used to derive Management Actions (often with substantial revision to make them more measurable);
- Targets have been used to derive Management Targets; and
- Monitoring and Reporting columns have been newly populated as there was no direct equivalent in the TSCMS (other than auditing the TSCMS).

Table 5: Management Based Provisions

	EPA Factor: Threatened and other conservational significant flora, fauna and ecological communities. **Objective/s:** **1. Minimise direct loss of Threatened and other conservation significant species, ecological communities or their habitat from disturbance activities.** **2. Minimise feral animal predation of Threatened or other conservation significant fauna.** **3. Minimise potential for entrapment of Threatened or other conservation significant fauna in trenches and turkeys nests.** **4. Minimise interaction of Threatened or other conservation significant fauna with the TSF or tailings.** **5. Minimise interaction between vehicles and Threatened or other conservation significant fauna.** **6. Avoid artificial changes to fire regimes to minimise impacts to Threatened and other conservation significant species and ecological communities.** **7. Prevent impacts from hydrocarbons and chemicals on Threatened and other conservation significant species or fauna habitat** **8. Minimise impacts from saline water on Threatened and other conservation significant flora and/or fauna habitat** **9. Update the status of Threatened and other conservation significant flora, fauna and ecological communities** **10. Minimise dust generation where practicable to avoid adverse impacts on Threatened or other conservation significant flora or fauna habitat.** **11. Minimise weed infestations competing with Threatened and conservation significant flora and fauna habitat.** **Key Environmental Values: Threatened and other conservational significant flora and fauna populations and ecological communities** **Key impacts and risks: Negative impact to Threatened and other conservational significant flora and fauna populations and ecological communities**

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
5-1 The proponent shall ensure that there is no loss of plants of Declared Rare Flora species due to the construction or operational activities unless otherwise approved. **6.1 The proponent shall implement the "Tropicana Gold Project Threatened Species and Communities Management Strategy, Version 2.0, Author: B Bastow, Issue Date: July 2009", or subsequent revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority. The objective of this strategy is to minimise adverse impacts to conservation significant species and communities.**				
Linked to objective 1: Minimise impacts to Threatened or other conservation significant species, ecological communities or their habitat within the approved areas.	Known locations of Threatened and other conservation flora, fauna or fauna habitat within 50 m of disturbance areas will be visibly demarcated. Infrastructure areas will be designed and located to avoid known locations of Threatened and other conservation flora, fauna or fauna habitat Infrastructure areas will be designed and located to avoid known locations of Threatened and conservation significant species and ecological communities, mapped habitat for Threatened fauna and large Marble Gum trees with hollows, where practicable. When disturbance is unavoidable, design infrastructure to minimise impacts. Areas of habitat for Threatened and other conservation significant species will be identified and contained within the TGM GIS database and used for planning and design. Recently defined boundary of the "Sandplain Vegetation of the Great Victoria Desert with Diverse Vertebrate Fauna PEC" imported to the TGM GIS database for use when planning activities along the Pinjin Infrastructure Corridor and in exploration areas. Collection of seed from Threatened and conservation significant flora in accordance with	**Indicator:** Threatened or other conservation significant species or ecological communities Review of conservation significant species and ecological communities status to ensure internal approvals are looking for all relevant species. Mapped habitat and GIS records of Threatened and other conservation significant species and ecological communities used to assess GDPs and inform field EINs Pre-disturbance GDP and EIN Post clearing survey reconciliation	Annually Updated as species are located during field inspection and as new surveys are undertaken and bi-annually when request updated layers are requested from DBCA. As required Annually post the September aerial imagery flyover	External: Regulatory notification should mortality of Threatened species occur or disturbance to Malleefowl mound to DBCA, DAWE and DWER. Regulatory notification should mortality of Threatened or other conservation significant species to DBCA. Collection of conservation significant flora reported/submitted to WA Herbarium (DBCA). Internal: Incident report GDPs and EINs

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
	the Biodiversity Conservation Act and DBCA requirements. Where seed from Threatened and conservation significant flora species have been collected for use in rehabilitation, samples will be contributed to the Threatened Flora Seed Centre (at the WA Herbarium)			
Linked to objective 2: Feral animals cannot access landfills or isolated turkeys nests In areas of known feral animal activity bins will be modified to prevent access by feral animals Feral animal populations will be controlled if they are found to be increasing	Site landfill will be fenced to exclude access by scavenging feral fauna. Installation of fencing/barriers around isolated turkeys nests. No pets will be permitted in TGM areas. All bins to be fitted with secure lids. Feral animal population numbers will be monitored to provide indications of whether control programs or trapping is required. Feral animal control programs and trapping to be undertaken if populations are deemed to be posing a risk.	**Indicator:** Feral animal populations Inspections of isolated turkeys nests for fence integrity Conduct routine feral animal abatement programs in areas of higher potential (Village, Admin Offices, Crib rooms) Workforce reports of feral animals Feral animal control programs	Various (depending on the TGM workplace inspection schedule) As required (depending on population numbers) As required (depending on sightings. As required (depending on population numbers).	External: CAR report Internal: Inspection records Summary of abatement programmes
Linked to objective 3: No habitation of turkeys nests (excluding decoy wetlands and avifauna) No conservation significant fauna mortalities trapped/ caught in fences, drill holes, trenches or in turkeys nests	Trenches will be designed, constructed and inspected to minimise potential entrapment of fauna Installation of fencing/barriers around isolated turkeys nests Installation of egress matting/ramps in turkeys nests	**Indicator:** Threatened or other conservation significant species Inspections of turkeys nests for fence integrity, evidence of fauna mortalities and condition of egress mats Drill hole completion audits	Various (depending on the TGM workplace inspection schedule). At the completion of a drill hole or a drill program.	External: CAR report Regulatory notification should mortality of Threatened fauna species occur to DBCA, DAWE and DWER.

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
	Exploration drill holes to be capped immediately after completion			Regulatory notification should mortality of other conservation significant species to DBCA. Internal: Incident reports Inspection records
Linked to objective 4: Maintain compliance with International Cyanide Management Code. No loss of threatened or other conservation significant fauna when WAD CN exceeds 50 mg/L at the decant pond. No uncontrolled releases of tailings outside the containment areas. Fauna trapped in tailings are rescued where safe to do so or recorded as mortalities	Weak Acid Dissociable Cyanide levels on the TSF will be managed in accordance with the TGM International Cyanide Management Code Certification. TSF freeboard design intended to contain a probable maximum precipitation (PMP) event Installation and maintenance of decoy ponds to deter fauna use of the TSF decant pond	**Indicator:** Threatened or other conservation significant fauna species TSF inspections Decant water monitoring Cyanide Code surveillance auditing Geotechnical auditing	Daily Online monitoring for limited analytes with monthly external testing of a wider analytical suite. Official Audit is Triennial With annual gap assessment Annual TSF Audit	External: CAR report Regulatory notification should mortality of Threatened fauna species occur to DBCA, DAWE and DWER. Regulatory notification should mortality of other conservation significant species to DBCA. Internal: Incident report Inspection records
Linked to objective 5: Reduce the risk of road kill mortality to Threatened or other conservation significant fauna species.	Planning and design of infrastructure corridors and resources supply (borrow/gravel pits) will be such to avoid mapped habitat for Threatened and other conservation significant fauna where practicable	**Indicator:** Threatened or other conservation significant fauna species Mapped habitat and GIS records of threatened or other conservation significant fauna and	GDPs and EINs must be approved prior to clearing programs being undertaken.	External: Regulatory notification should mortality of Threatened fauna species occur to DBCA, DAWE and DWER.

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
	To minimise vehicle movements, establish a charter flight for Kalgoorlie based employees and contractors to access site. Speed limits to be implemented and enforced along all roads. Any fauna killed on roads encouraged to be reported to environmental personnel for recording.	fauna habitat used to assess GDPs Post clearing survey reconciliation Periodic speed checks	Ongoing	Regulatory notification should mortality of other conservation significant species to DBCA. Internal: Summary of speed check results Incident reports of fauna mortalities
Linked to objective 6: No adverse impacts to mapped habitat for conservation significant species and ecological communities as a result of fires generated by TGM activities	Operational practice is to not intervene with naturally occurring lightning initiated fires unless there is a risk to people or property. Develop and implement a Prevention of Bushfire Procedure Establish fire breaks adjacent to high fire risk areas. Consult with DBCA on fire /emergency planning at TGM Communicate notice of Vehicle Movement Bans and Catastrophic fire conditions to work groups. Conduct activities in accordance with Total Fire Ban exemption permit requirements (current to 2021)	**Indicator:** Threatened or other conservation significant fauna habitat Continued monitoring and communication of Vehicle Movement Bans, Catastrophic fire conditions, total fire bans and path/spread of lightning initiated regional fires in the general TGM area	Sitewide notifications sent out by the ESOs when total fire bans are in place. Weather reports are provided sitewide daily. Lightning alerts are sent out when required.	External: Regulatory notification should TGM initiated fire spread to vegetation (excluding back burns which would be in any event conducted in consultation with local authorities) Regulatory notification should TGM initiated fire occur in mapped habitat for Threatened fauna.
Linked to objective 7: No major spills from fixed chemical or hydrocarbon storage facilities impacting mapped habitat for Threatened Fauna species	Where practicable, chemical and hydrocarbon storage facilities are to be located away from mapped habitat for Threatened fauna species. Manage environmentally hazardous substances in accordance with the site's Dangerous Goods	**Indicator:** Threatened or other conservation significant fauna species Storage facility inspections	Various (depending on the TGM workplace inspection schedule).	External: Regulatory notification should excursion occur CAR report Internal:

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
	licences, applicable Australian Standards and TGM's IMS.	Dangerous Good License Audits Observation of exception	Annually As required	Incident report
Linked to objective 8: Saline water pipeline leaks/ruptures are promptly shut down No mapped habitat for Threatened species is affected by dust suppression overspray killing vegetation	Where practicable, saline water pipelines and roads located away from mapped habitat for Threatened fauna species. Process Water Supply Borefield to TGM pipeline will be buried or bunded with leak detection Smaller water carts used to apply dust suppression along roads adjacent to vegetation	**Indicator:** Threatened or other conservation significant fauna habitat Citect records to monitor for pipeline leaks Observation – sudden browning of vegetation	Ongoing (live online) Annual Vegetation Monitoring Annual aerial imagery review ADHOC visual monitoring whilst operating around site.	External: Regulatory notification should excursion occur CAR report Internal: Incident report
Linked to objective 9: Conservation status of Threatened and other conservation significant species and communities is maintained. New species are added to the lists if they gain a conservation status.	Conduct an annual review and update the status of the TGP's Threatened and Priority species and communities annually against Western Australian and Commonwealth listings. Update TGM's general induction to provide current status of Threatened species. Update workforce education packages to provide current status of conservation significant species	**Indicator:** Threatened or other conservation significant species Review of lists on DBCA website, EPBC Act website and IUCN Red List website.	Annually (usually around November)	External: Triennial update and review of TSCMP Internal: Annual update of listed species tables in TSCMP Updated general induction and workforce education packages
5-3 Should the potential impact sites show a 25 per cent (or greater) decline in cover or productivity as compared to the reference sites, the proponent shall provide a report to the Chief Executive Officer of the Office of the Environmental Protection Authority within 21 days of the decline being identified which:				

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
1. Describes the decline **2. Provides information which allows determination of the likely root cause of the decline and;** **3. If likely to be caused by activities undertaken in implementing the proposal, states the actions and associated timelines proposed to remediate the decline.**				
Linked to objective 10: No decline of vegetation health of threatened and other conservation significant flora communities inside the approved areas >25% due to excess dust	Implement dust suppression on active haul roads and internal roads with high traffic (e.g., Village Access Road) Implement dust control in the process plant Minimise new disturbance areas and vegetation clearing	**Indicator:** Threatened or other conservation significant flora species Annual vegetation monitoring Capturing/reporting of downtime in dust suppression systems. Pre-disturbance GDP) and EIN approval	Annually As required GDPs and EINs to be undertaken as required when clearing programs are required	External: Annual vegetation monitoring reported as part of the CAR report Internal: Incident reporting of excessive dust GDPs and EINs
9-4 No new species of weeds (including both declared weeds and environmental weeds) shall establish in the area as a result of the proposal				
Linked to objective 11: No introduction of new weed species and spread of known weed populations within the operations disturbance footprint as a result of the mining activities.	Implement a vehicle hygiene inspection programme for equipment mobilising to site. Record the location of weed populations. Inspect areas of known past weed infestations at high-risk times i.e., after rainfall Following rehabilitation, areas will be monitored and treated for weeds, if necessary	**Indicator:** Weed populations Vehicle hygiene inspection records Weed layer in TGM's GIS system	As required As required when reported to the Environment or GIS team	External: CAR report Internal: Incident report Hygiene inspection and area inspection records

Objective-based				
Management Targets	**Management Actions**	**Monitoring**	**Timing/Frequency of Actions**	**Reporting**
	Where equipment conducting road maintenance activities at Pinjin Station is likely to interact with weed species then it will be cleaned down at the Pinjin Station boundary Workplace inspections will include a check for weeds in the work areas and actions to remove or treat weeds will be assigned to the responsible position. Exploration programs that are located in or require trafficking through areas at risk of weeds to have stricter conditions relating to vehicle hygiene when leaving weed impacted locations.	Inspections of past weed infestation areas Weed monitoring within rehabilitation areas EIN	Post rainfall events As required post rehabilitation of a disturbed area. EINs to be undertaken as required when clearing programs are requested	

Management actions justification: The section 38 PER included a section on the risk-based approach undertaken with the review along with a risk table for all environmental impacts. Public comments and relevant regulator feedback was considered in the development of the original Threatened Species and Communities Management Strategy. The risk-based approach to the creation of these objectives and targets was included in the original Threatened Species and Communities Management Strategy.

4.3 Monitoring

The monitoring programmes to assess the effectiveness of management actions and satisfy reporting requirements are summarised below.

Table 1: Monitoring Undertaken as Part of the TSCMP

Monitoring Event/Type	Monitoring Action	Frequency
Disturbance monitoring	Mapped habitat and species locations from pre-disturbance biological surveys	Project even triggered – i.e., new development requires baseline studies
	Ground disturbance permit (GDP) and Environmental and Heritage Inspection (EIN)	Must be completed before each clearing program
	Post clearing reconciliation survey	Annually (as a part of the Annual flyover aerial photography disturbance reconciliation)
	Post disturbance monitoring of Threatened flora populations (should a Threatened flora incident occur)	Contingent – conducted only if an unauthorised clearing incident occurs near Threatened flora
	Annual flyover aerial photography	Annually (usually September/October)
	Monitoring of propagules of Threatened flora	Contingent – conducted as a remedial measure in response to unauthorised clearing incident impacting Threatened flora or if seed has been collected for use in rehabilitation
Weed monitoring	Inspection of past weed infestations areas	Episodic - based on rainfall & seasonality
	Vehicle hygiene inspections	As required
	Weed layer in TGM GIS system	Updated as new populations are encountered
	Rehabilitation monitoring (including weed monitoring)	Dependent on age and scale of rehabilitation
Species/Ecological Community Status	Review DBCA and EPBC Act lists to update status of conservation significant species and communities. Request up to data spatial data of threatened flora, fauna and communities from DBCA	Annually (usually October/November) Undertaken each 2 years in January
Feral animals	Inspections of isolated turkeys' nests and water pond fences for fence integrity	Various frequencies (depending on the TGM workplace inspection schedule)
	Workforce reports of feral animals	Event based
	Feral animal abatement programme of feral animals in higher risk areas	Episodic (currently annually)

Monitoring Event/Type	Monitoring Action	Frequency
Fauna mortality/mortality risk monitoring	Inspections of turkeys' nests for fence integrity, evidence of fauna mortalities and condition of egress mats	Various frequencies (depending on the TGM workplace inspection schedule)
	Inspection of open excavations (trenching, building footings, exploration sumps etc) to make sure adequate egress is installed.	Various frequencies (depending on active projects)
	Observation of fauna mortalities by workforce (incident report)	Event based
	Daily TSF monitoring	Daily
	Cyanide code auditing	Biennially
	Geotechnical auditing	Annually
	Decant water monitoring	Monthly (NATA Laboratory) Continuous (non-NATA Online)
	Drill hole completion audit	Episodic – related to timing of drilling programme
	Vehicle speed checks	Random
Decline in habitat monitoring	Annual vegetation monitoring	Annually
	Monitoring and communication of Vehicle Movement Ban, Catastrophic fire conditions, total fire bans, and the path/spread of lightning initiated regional fires in the general TGM area	Continuous
	Hydrocarbon and chemical storage facility inspections	Quarterly
	Citect records of leak detection	Continuous
Rehabilitation	Rehabilitation monitoring (including weed monitoring)	Dependent on age and scale of rehabilitation
	Management signoff of open areas for rehabilitation	As required

4.4 Reporting

Incidents are recorded through use of ISIMS as TGM's incident management database. This represents the primary reporting tool used at TGM for events regardless of whether they become externally reportable or remain internal incidents.

In its review of the 2017 draft of the TSCMS, the DBCA requested inclusion of a commitment to report incidents involving Threatened and priority flora and fauna to DBCA. Incidents involving Threatened flora and fauna species will be reported to DWER, DAWE and DBCA, whereas incidents involving other conservation significant species (i.e., priority species) will be reported to DBCA.

Table 7: External Reporting and Notification Requirements under the TSCMP

Notification/Reporting Event	Action	Responsibility	Timing
Incident involving Threatened species	Report to DBCA, DWER and DAWE.	Manager: Environment Operations	As soon as practicable but no later than 5 pm of the next usual working day of first becoming aware of the event
Incident involving other conservation significant species	Report to DBCA (as per comments from DBCA review)	Manager: Environment Operations	As soon as practicable but no later than 5 pm of the next usual working day of first becoming aware of the event
Threshold exceedance	Report to DWER and DAWE (and DBCA if threshold exceedance involves mortality of Threatened species)	Manager: Environment Operations	As soon as practicable but no later than 5 pm of the next usual working day of first becoming aware of the event
Compliance Assessment Report	Annual audit of TSCMP included in CAR report	Manager: Environment Operations	Annually by 23 December.
Annual Vegetation Monitoring Report	Report to DWER via CAR report (as an Appendix)	Manager: Environment Operations	Annually by 23 December.
Review of TSCMP	Conduct triennial review	Manager: Environment Operations	Triennially
Public accessibility of the TSCMP	Make the TSCMP publicly available on the Tropicana JV website	Manager: Environment Operations	Each triennial review

5 Adaptive Management and Review of the Plan

5.1 Adaptive Management

Adaptive management involves:

- Implementing mitigation or remedial measures to either stop degradation of a value occurring or to repair the impact being experienced.
- Monitoring and evaluation against environmental criteria for outcome-based provisions and management targets for management-based provisions
- Adapting management and mitigation measures and monitoring, including work by third parties in the Great Victoria Desert, to achieve management objectives.

Management targets will require ongoing review and consideration of their appropriateness in terms of if management objectives are being achieved. Where targets are not meeting objectives, adjustments will need to be made.

When an event occurs or monitoring data recorded suggests a control provided by management action has failed, the cause of the event will need to be identified to determine if the action itself has been the failure or its implementation in which case changes will need to be made to reduce the likelihood of re-occurrence.

Technological improvements can also be a cause for adaptive management, in which case adopting new technologies will improve either measurement of the effectiveness of outcomes or result in a change to management actions to one which is seen to be more appropriate.

5.2 Review of the TSCMP

The TSCMP will be audited annually as specified in the TGM Compliance and Assessment Plan (CAP) for implementation, effectiveness, and compliance to commitments. The annual audit findings will be provided to DWER as an appendix to the annual TGM Compliance Assessment Report required under Ministerial Statement 839. Feedback from DCBA has also requested the results of auditing the TSCMS/TSCMP. This review will be targeted at checking compliance against the TSCMP.

To maintain currency of the conservation status of species of Threatened and other conservation significant species and communities and annual review of EPBC Act, Biodiversity Act and DBCA priority lists will be undertaken (updating Appendices B and C).

A triennial review of the Threatened Species and Community Management Strategy will be completed to adjust the plan to fit with adaptive management changes implemented over the previous three years and ensuring the plan is appropriately focused to achieving the stated objective of the TSCMP as required by Condition 6.2 of Ministerial Statement 839. In line with Condition 4 of EPBC Act Approval 2008/4270 once the TSCMP has been approved by the EPA WA a copy of the TSCMP will be provided to the Department Biodiversity, Conservation and Attractions.

A summary of changes made between the 2014 2014 TSCMS and current TSCMP is provided in Appendix 5.

6 Stakeholder Consultation

Consultation has been undertaken with the DBCA and DWER in reviewing the 2014 TSCMS to the current TSCMP. Key feedback received from these agencies is provided below:

6.1 DBCA Feedback January 2018 (of Version 3)

“That the 2017 Threatened Species and Communities management Strategy (TSCMS) includes a map(s) that clearly illustrates the area(s) that the strategy applies.”

Response: The Tropicana JV has incorporated two maps into the TSCMP outlining the development envelopes. Exploration activities whilst minor in impact, will occur outside of these areas.

1. “That further clarification is provided on the ongoing use/retention of Management Strategies and/or Consolidated Management Strategies” and
2. “That the Management Strategies are retained, alternatively further specific information is provided in the TSCMS regarding the Consolidated Management Strategies including more specific details around proposed management measures/actions.”

Response: At the time of the 2017 TSCMS, the Tropicana JV noted TSCMS was largely comprised of strategies from within the Construction and Operational Management Strategies. However, these have been superseded by development of, and subsequent ISO certification of, TGM’s Integrated Management System, with greater system documentation. Thus, DBCA were seeking to see implementation actions in the strategy rather than references to management system documentation (e.g., procedures etc). In preparing to present these changes to DBCA in late November/early December 2019, further comment and guidance was received in that DBCA’s interest is more technical in nature rather than how a strategy is presented, which was more the hegemony of DWER. Subsequent discussion with DWER’s provided advice to revise the TSCMS into the EPA’s management plan template.

The Tropicana JV has had to critically review the strategies in the TSCMS to fit into the management plan template, including making them more actionable and measurable whilst avoiding use of references to management system documentation where possible. This resultant TSCMP has attempted to address the collective feedback from both agencies insofar as it is now structurally aligned with the EPA’s template, has retained strategies but refined them to implementation actions (or more specifically management actions) but has also seen removal of strategies which were not readily actionable or measurable such as the noise strategies.

3. “That the commitment to report incidents involving threatened and priority flora or threatened fauna species to DBCA is included in the latest version of the TSCMS.”

Response: This has been incorporated as part of the reporting against outcome based and management provisions and within the reporting section.

4. “That the audit and performance reporting requirements in the 2014 TSCMS are included in the latest version of the TSCMS.”

Response: The 2014 TSCMS included both biannual and annual auditing in different sections of the document. Annual auditing is conducted and included as an Appendix of the CAR report. The additional reference to biannual auditing is spurious and may have been intended to be biennial. Given established annual vegetation monitoring as part of the CAR, annual internal update of the status of conservation significant species and communities and formal triennial update of the strategy as required by condition 6.2 of Ministerial Statement 839, auditing has been aligned to an annual frequency to be reported at the time of the CAR report. The reporting section of the TSCMP has been updated to provide a copy of the annual TSCMP audit to DBCA.

5. “That AGAA provides a summary sheet /table of all changes to the TSCMS.”

Response: The Tropicana JV agrees with this proposition, although given the extensive changes made in transitioning the TSCMS to the TSCMP, a summary table of changes is provided in Appendix 5 to reconcile how the document has changed. As the entire document has changed, it is impractical to summarise all changes.

6. “That all references to the Department of Parks and Wildlife should be revised to the Department of Biodiversity, Conservation and Attractions.”

Response: All references have been updated to the Department of Biodiversity Conservation and Attractions or DBCA, with the exception of department names enshrined in the conditions of Ministerial Statement 839. Condition 6.2 notes the department is named Department of Environment and Conservation which DBCA was a part of at the time Ministerial Statement 839 was issued.

6.2 DBCA – Phone Discussion - M Baker 3 December 2019

The context of discussion was to arrange a meeting with DBCA to run through changes to the TSCMS and in particular structural changes to the document and feedback on comments from previously supplied feedback (discussed above). DBCA clarified their input should be at a technical level only, not format/structure, which was the role of DWER.

6.3 DWER – Phone Discussion - L Zheng 4 December 2019

Following on from consultation with DBCA, the Tropicana JV sought engagement with DWER to meet on the TSCMS. Summary of feedback provided:

1. "It is preferred that TGM use the latest, contemporary templates for Management Plans (i.e., the EPA Management Plan Template)"

Response: The Tropicana JV supports use of the EPA's template resulting in this version of the TSCMP.

2. "TGM to include all engagement correspondence from DBCA with the submission"

Response: This section provides a narrative of consultation with DBCA and DWER in chronological order.

3. "Submit via registrar@dwer.wa.gov.au email address and it will be assigned an assessing officer"

Response: Acknowledged and will be conducted once ready to be submitted.

4. "If DWER require a discussion meeting, TGM will be advised of that"

Response: Acknowledged.

5. "Timing of the review is not urgent"

Response: Acknowledged.

7 Bibliography

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Churchill (2009) Assessment of habitat availability for the Sandhill Dunnart. Sminthopsis psammophila in Western Australia

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Ecologia (2009) Tropicana Gold Project Troglofauna Survey Report

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Tropicana JV (2009). Regional Threatened Flora Survey

URS (2009). Malleefowl and Mulgara Survey TGP Operational Area

URS (2009). Marsupial Mole Survey: Proposed Infrastructure Corridor – Pinjin Option

8 Appendice 1: Surveys for Conservation Significant Flora, Fauna & Habitat

Study	Summary/Key Findings Related to Conservation Significant Fauna
Flora and Vegetation	
Ecologia (July 2009) Assessment of the Flora and Vegetation of Operational Area and its Surrounding	Level 2 flora and vegetation survey of Operational Area development envelope and beyond. Conducted in November 2006, June-July 2007 across 1356 km^2. Survey recorded: • *Conospermum toddii* (Declared Rare Flora at the time) • *Dampiera eriantha* (Priority 1 at the time) • *Baeckea* sp. Sandstone (Priority 1 at the time) • *Baeckea* sp. Great Victoria Desert (Priority 2 at the time) • *Dicrastylis nicholasii* (Priority 2 at the time) • *Malleostemon* sp. Officer Basin (Priority 2 at the time) • *Olearia arida* (Priority 2 at the time) • *Grevillea secunda* (Priority 2 at the time) • *Acacia eremophila* numerous -nerved variant (Priority 3 at the time) • *Acacia eremophila* var. *variabilis* (Priority 3 at the time) • *Dicrastylis cundeeleensis* (Priority 3 at the time) • *Microcorys macredieana* (Priority 3 at the time) • *Micromyrtus stenocalyx* (Priority 3 at the time) • *Daviesia purpurascens* (Priority 4 at the time) • *Lepidobolus deserti* (Priority 4 at the time) • *Caesia talingka* (undescribed species at the time) • *Tricoryne* sp. Great Victoria Desert (undescribed species at the time) • *Lechenaultia divaricata* (new record of this species in WA at the time) Three naturalised weed species were also recorded: Sonchus oleraceus, Spergularia rubra, Erodium aureum

Study	Summary/Key Findings Related to Conservation Significant Fauna
Ecologia (July 2009). Operational Area Threatened Flora Assessment	Threatened flora survey targeting DRF and Priority species conducted in three field trips in October 2007, July 2008 and November 2008. 18 populations of the DRF *Conospermum toddii* were located. The following 12 priority taxa were also recorded • *Dampiera eriantha* (Priority 1 at the time) • *Baeckea* sp. Sandstone (Priority 1 at the time) • *Baeckea* sp. Great Victoria Desert (Priority 2 at the time) • *Dicrastylis nicholasii* (Priority 2 at the time) • *Malleostemon* sp. Officer Basin (Priority 2 at the time) • *Olearia arida* (Priority 2 at the time) • *Acacia eremophila* numerous-nerved variant (Priority 3 at the time) • *Dicrastylis cundeeleensis* (Priority 3 at the time) • *Microcorys macredieana* (Priority 3 at the time) • *Micromyrtus stenocalyx* (Priority 3 at the time) • *Daviesia purpurascens* (Priority 4 at the time) • *Lepidobolus deserti* (Priority 4 at the time) The undescribed species *Caesia talingka* was also located

Study	Summary/Key Findings Related to Conservation Significant Fauna
Tropicana JV (July 2009). Regional Threatened Flora Survey	Consolidation of three flora and vegetation surveys which included an area 50 km south of the Operational Area (Survey 1), the Queen Victoria Spring Nature Reserve (Survey 2) and Plumridge Lakes Nature Reserve (Survey 3) to determine the extent of conservation species outside of the TGP disturbance areas. These surveys have recorded • *Conospermum toddii* (Declared Rare Flora at the time) – located in surveys 2 and 3 • *Baeckea* sp. Great Victoria Desert Priority 2 at the time) – located in surveys 1 to 3 • *Dicrastylis nicholasii* (Priority 2 at the time) – located in surveys 1 & 3 • *Olearia arida* (Priority 2 at the time) – located in surveys 1 and 3 • *Grevillea secunda* (Priority 2 at the time) – located in surveys 1 to 3 • *Dicrastylis cundeeleensis* (Priority 3 at the time) located in surveys 1 & 3 • *Microcorys macredieana* (Priority 3 at the time) located in surveys 1 to 3 • *Micromyrtus stenocalyx* (Priority 3 at the time) located in surveys 1 to 3 • *Lepidobolus deserti* (Priority 4 at the time) located in surveys 1 & 2 • *Caesia talingka* (new species at the time) – located in surveys 2 & 3. • *Comesperma viscidulum* (Priority 4 at the time) – located in survey 1.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Ecologia (July 2009) Tropicana-Transline Infrastructure Corridor: Vegetation and Flora Survey	Level 1 flora and vegetation survey of the Cable Haul Road conducted in July and August 2007. Survey recorded: • *Dampiera eriantha* (Priority 1 at the time) • *Baeckea* sp. Great Victoria Desert (Priority 2 at the time) • *Dicrastylis nicholasii* (Priority 2 at the time) • *Isotropis canescens* (Priority 2 at the time) • *Malleostemon* sp. Officer Basin (Priority 2 at the time) • *Olearia arida* (Priority 2 at the time) • *Physopsis chrysotricha* (Priority 2 at the time) • *Grevillea secunda* (Priority 2 at the time) • *Dicrastylis cundeeleensis* (Priority 3 at the time) • *Microcorys macredieana* (Priority 3 at the time) • *Micromyrtus stenocalyx* (Priority 3 at the time) • *Daviesia purpurascens* (Priority 4 at the time) • *Lepidobolus deserti* (Priority 4 at the time) • *Comesperma viscidulum* (Priority 4 at the time) • *Eremophila ?undulata* (insufficient material to formally identify but was Priority 2 at the time) • *Caesia talingka* (undescribed species at the time). The survey also located one weed species *Carrichtera annua.* To the limits of the known boundary of the Yellow sandplain communities of the Great Victoria Desert Priority 3 Ecological Community, it was extrapolated the proposed corridor would intersect 15 km of the PEC in two areas (a 12 km and 3 km section)

Study	Summary/Key Findings Related to Conservation Significant Fauna
Mattiske Consulting Pty Ltd (July 2009) Flora and Vegetation Survey of Proposed Pinjin Access Road and Infrastructure Corridor L31/57, L39/185, Tropicana Mine - Pinjin Station.	Level 1 flora and vegetation survey of the Pinjin Access road conducted in December 2007, March 2008 and May 2008. Follow-up targeted searches for Eucalyptus articulata (DRF) was conducted in March and May 2008, Threatened Species Assessment was in May and June 2009 which were appended to the survey report. Survey recorded • *Conospermum toddii* (Declared Rare Flora at the time) • *Baeckea* sp. Great Victoria Desert Priority 2 at the time) • *Dicrastylis nicholasii* (Priority 2 at the time) • *Malleostemon* sp. Officer Basin (Priority 2 at the time) • *Olearia arida* (Priority 2 at the time) • *Grevillea secunda* (Priority 2 at the time) • *Acacia* eremophila numerous -nerved variant (Priority 3 at the time) • *Acacia eremophila* var. *variabilis* (Priority 3 at the time) • *Thryptomene eremaea* (Priority 2 at the time) • *Dicrastylis cundeeleensis* (Priority 3 at the time) • *Eucalyptus pimpiniana* (Priority 3 at the time) • *Microcorys macredieana* (Priority 3 at the time) • *Micromyrtus serrulata* (Priority 3 at the time) • *Micromyrtus stenocalyx* (Priority 3 at the time) • *Daviesia purpurascens* (Priority 4 at the time) • *Lepidobolus deserti* (Priority 4 at the time) • *Hibbertia* sp. (nov.) a potential new species. The *Eucalyptus articulata* search did not locate the species at any location. One weed species *Salvia verbenaca* was recorded at five locations during the survey on Pinjin Station. Whilst at the time there was no definitive boundary for the Yellow Sandplain communities of the Great Victoria Desert, it was considered that six sections of the proposed corridor potentially intersect the PEC.
Botanic Gardens and Parks Authority (November 2009). A Molecular Assessment of the Identity of Regenerating Mallees on the Tropicana Mine Access Rd, in relation to DRF Eucalyptus articulata (Myrtaceae)	DNA testing of potential regenerating mallees sampled by Mattiske Consulting Pty Ltd to check field assessment the mallees were not E. articulata. Four independent molecular DNA tests concluded the samples were not E. articulata.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Botanica Consulting (July 2009). Minigwal Trough Water Supply Area and Pipeline Corridor Vegetation and Flora Survey	Flora and vegetation survey for the Process Water Supply Borefield conducted in November and December 2008. Survey recorded: • *Baeckea* sp. Great Victoria Desert (Priority 2 at the time) • *Dicrastylis nicholasii* (Priority 2 at the time) • *Olearia arida* (Priority 2 at the time) • *Dicrastylis cundeeleensis* (Priority 3 at the time) • *Microcorys macredieana* (Priority 3 at the time) • *Daviesia purpurascens* (Priority 4 at the time) • *Lepidobolus deserti* (Priority 4 at the time)
Mattiske Consulting Pty Ltd (January 2010) Threatened Flora Collections Tropicana Gold Project L31/56, L31/57, L39/185 Operational Area – Pinjin Station	Completion of a spring (October 2009) flora and vegetation survey to supplement the three surveys conducted along the Infrastructure Development Envelope from 2007/2008. Survey recorded: • *Conospermum toddii* (Declared Rare Flora at the time) • *Dampiera eriantha* (Priority 1 at the time), • *Baeckea* sp. Great Victoria Desert Priority 2 at the time) • *Dicrastylis nicholasii* (Priority 2 at the time) • *Olearia arida* (Priority 2 at the time • *Grevillea secunda* (Priority 2 at the time) • *Malleostemon* sp. Officer Basin (Priority 2 at the time) • *Thryptomene eremaea* (Priority 2 at the time) • *Dicrastylis cundeeleensis* (Priority 3 at the time) • *Eucalyptus pimpiniana* (Priority 3 at the time) • *Microcorys macredieana* (Priority 3 at the time) • *Micromyrtus serrulata* (Priority 3 at the time) • *Micromyrtus stenocalyx* (Priority 3 at the time) • *Daviesia purpurascens* (Priority 4 at the time) • *Lepidobolus deserti* (Priority 4 at the time) • *Comesperma viscidulum* (Priority 4 at the time) A potentially new species of *Hibbertia* (*?nov*) (undescribed at the time). Subsequent review at the WA Herbarium found this to be the same as *Hibbertia* aff *inclusa* which had previously been collected in the Officer Basin. In addition to these species, *Physopsis chrysotricha* (Priority 2 at the time was opportunistically located outside of the survey area)

Study	Summary/Key Findings Related to Conservation Significant Fauna
Mattiske Consulting Pty Ltd (October 2010). Flora and Vegetation Survey of the Minigwal South Pipeline Corridors and Water Supply Area	Level 1 Flora and Vegetation Survey of the Minigwal South Borefield Area conducted in May 2010. Survey recorded: *Comesperma viscidulum* (Priority 4 at the time) *Discrstylis cundeeleensis* (Priority 4 at the time) *Olearia arida* (Priority 4) Vegetation association S11 was consistent with Yellow sandplain communities of the Great Victoria Desert Priority 3 Ecological Community
Botanica Consulting (May 2015). Minigwal Borefields (PWS) Level 1 Flora & Vegetation Survey	Flora and vegetation survey of the expansion area for the Process Water Supply Borefield in September 2014. Survey recorded: • *Conospermum toddii* (Priority 4 at the time) • *Olearia arida* (Priority 4 at the time)
GHD (February 2016). Madras Prospect and Access Corridors Level 1 Flora and Fauna Surveys	Survey recorded: • *Caesia rigidifolia* (Priority 1 at the time) • *Dampiera Eriantha* (Priority 1 at the time) • *Eremophila arachnoides subsp.tenera* (Priority 1 at the time) • *Isotropis canescens* (Priority 2 at the time) • *Caustis deserti* (Priority 3 at the time) • *Eucalyptus pimpiniana* (Priority 3 at the time) • *Micromyrtus serrulate* (Priority 3 at the time) • *Dicrastylis cundeeleensis* (Priority 4 at the time) • *Grevillea secunda* (Priority 4 at the time) • *Oleria arida* (Priority 4 at the time)

Study	Summary/Key Findings Related to Conservation Significant Fauna
Mattiske (December 2020) Flora and Vegetation Assessment	Survey recorded: • *Acacia eremophila* (Priority 3 at the time) • *Caesia sp.* Great Victorian Desert (Priority 2 at the time) • *Dampiera Eriantha* (Priority 2 at the time) • *Dicrastylis cundeeleensis* (Priority 4 at the time)
Terrestrial Fauna	
Benshemesh and Schulz (September 2008). Survey of the underground signs of marsupial mole in the WA Great Victoria Desert.	Survey for Southern Marsupial Moles across the Great Victoria Desert predominantly within Western Australia but also into South Australia. Results found 170 backfilled tunnels from 89 trenches at 325 sites, confirming the Southern Marsupial Mole has a widespread distribution and is probably more common than previous records suggest. Activity suggests more than 30 km of mole holes per ha. With 10% of mole holes appearing to be fresh, tunnelling appears to be at a rate of 3 km/ha since the last soaking rains occurred.
Ecologia (July 2009). Tropicana Gold Project Operational Area Vertebrate Fauna Assessment.	Level 2 fauna survey of the Operational Area conducted in three sampling events, November 2006, March 2007 and March 2008 plus an additional Southern Marsupial Mole survey in August 2007. Survey recorded or found secondary evidence of: • Australian Bustard (Priority 4 at the time) • Peregrine Falcon (Schedule 4 at the time) • Rainbow Bee-eater (Migratory at the time) • Evidence of Southern Marsupial Mole (Endangered/Schedule 1 at the time) • Eight inactive mounds of Malleefowl (Vulnerable/Schedule 1 at the time)
URS (June 2009). Malleefowl and Mulgara Survey TGP Operational Area	Targeted fauna survey for Malleefowl and Mulgara of the Operational Area and surrounds conducted in April and August 2008. Potentially suitable habitat occurs in the Operational Area development envelope and its surrounds. Survey located 13 Malleefowl inactive mounds (Vulnerable/Schedule 1 at the time) with no signs of recent use (at least five years since last use). No direct recent or historical evidence of Mulgara was located during the surveys and no historic evidence present in the survey area. However, some suitable Mulgara habitat was located. Evidence of Australian Bustard (Priority 4 at the time) was also recorded opportunistically.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Gaikhorst and Lambert (September 2009). Sandhill Dunnart Survey of the Proposed Operational Area and Infrastructure Corridors (Pinjin and Bypass)	An initial desktop assessment of suitable habitat for the Sandhill Dunnart, followed by ground truthing habitat, then conducting targeted surveys. Surveys conducted in March and May 2008. No Sandhill Dunnarts were recorded however, some of the habitat areas had experienced fire or had poor spinifex quality. Amongst the fauna recorded or opportunistically observed were two old disused Malleefowl mounds (Vulnerable/Schedule 1 at the time).
Churchill (December 2009) Assessment of habitat availability for the Sandhill Dunnart. Sminthopsis psammophila in Western Australia.	Assessment of habitat availability for the Sandhill Dunnart. Found whilst there is some habitat within the Operational Area, most lies to the west of the Operational Area development envelope. The bulk of the proposed footprint occurs in vegetation that is marginal habitat for the Sandhill Dunnart. In the Infrastructure Development Envelope survey area , 1170.7 ha was assessed as being prime habitat of which 63 ha is impacted by the corridor, although most of this area had been burnt by fire making it unsuitable for at least the next decade.
Ecologia (July 2009) Tropicana-Transline Infrastructure Corridor Level 1 Fauna Assessment.	Level 1 fauna survey of the Transline Infrastructure Corridor (option did not proceed) conducted in July and August 2007. Survey recorded or found secondary evidence of: • Evidence of Southern Marsupial Mole (Endangered/Schedule 1 at the time) • Fresh tracks and eight Malleefowl mounds (Vulnerable/Schedule 1 at the time)
Ninox Wildlife Consulting (January 2009) A Level One Survey of the Vertebrate Fauna Infrastructure Corridor Pinjin Option	Level 1 fauna survey over the Infrastructure Development Envelope conducted in December 2007 and March 2008. Survey recorded or found evidence of: • Malleefowl (sighted plus tracks and mounds) (Vulnerable/Schedule 1 at the time) • Rainbow Bee-eater (Migratory at the time) • Australian Bustard (Priority 4 at the time)
URS (February 2009). Marsupial Mole Survey: Proposed Infrastructure Corridor – Pinjin Option	Targeted survey for Southern Marsupial Moles with secondary aims of recording evidence of Sandhill Dunnarts, Malleefowl and Mulgara conducted in November 2007, March 2008 and April 2008. 73 trenches from 25 sites were excavated with ten Mole holes identified. No direct evidence of Mulgara, Sandhill Dunnarts or Malleefowl was identified but an inactive Malleefowl mound was located. Suitable habitat for Mulgara was however located. Other conservation significant species recorded were: • Rainbow Bee-eater (Migratory at the time) and • Australian Bustard (Priority 4 at the time)

Study	Summary/Key Findings Related to Conservation Significant Fauna
Ecologia (July 2009). Tropicana Gold Project Minigwal Trough Water Supply Area and Pipeline Corridor Level 1 Fauna Survey	Level 1 fauna survey of the Process Water Supply Borefield area and pipeline corridor conducted in March 2008. Survey recorded: • Australian Bustard (Priority 4 at the time) • One inactive Malleefowl mound (Vulnerable/Schedule 1 at the time)
Ninox Wildlife Consulting (August 2010). A Level 1 Survey of the Vertebrate Fauna of the Proposed Minigwal South Pipeline	Level 1 survey conducted in June 2010 at Minigwal South. Survey recorded the Australian Bustard (Priority 4 at the time)
GHD (February 2010) Second Round Sandhill Dunnart surveys of the Proposed operational area and infrastructure corridor	Follow-up targeted survey for Sandhill Dunnart in the Operational Area and Infrastructure Development Envelope conducted in November 2009). The survey did not record any Sandhill Dunnarts. However, the study did record: • Australian Bustard (Priority 4 at the time) • Crested Bellbird (Priority 4 at the time) • Rainbow Bee-eater (Migratory at the time) Despite not recording any Sandhill Dunnarts the area west of the Operational Area and in the southwest of the Operational Area could be considered prime habitat for Sandhill Dunnart. It was concluded Sandhill Dunnarts are either present in low numbers or locally extinct.
Mason, L. (2011). Physiology of some Australian burrowing mygalomorph spiders (*Aganippe* and *Synothele*) and implications for their conservation and management	Honors thesis conducted by Mason, L. to study the implications for conservation and management of the Australian endemic *Aganippe* and *Synothele*. The study investigated the physiological responses of the four aforementioned Australian trapdoor-constructing mygalomorph spider species. The study indicates that mygalomorphs are highly vulnerable to desiccation in air not close to saturation point. Therefore, it is imperative that the importance of the burrow to the survival of the mygalomorph species is considered with regard to conservation management.
Kingfisher Environmental Consulting (2014) Minigwal Trough Borefield (PWS) and Pipeline Fauna Survey	Level 1 Fauna survey of the Process Water Supply Borefield conducted in 2014. Survey recorded: • Evidence of Malleefowl including 12 mounds (of which two were active or recently active) and tracks (Schedule 1/vulnerable at the time) • Southern Marsupial Mole tunnels (Schedule 1/Endangered at the time) • Brush-tailed Mulgara burrow and scat (Priority 4 at the time) • Australian Bustard (Priority 4 at the time)

Study	Summary/Key Findings Related to Conservation Significant Fauna
Phoenix Environmental Sciences (2015). Monitoring of Trapdoor Spiders (Mygalomorphae) for the Tropicana Gold Mine	A total of 18 spider burrows were marked at the 10 monitoring sites during the field survey. These included four burrows of Aganippe, six burrows af Aname and two burrows of Cethegus trapdoor spiders. There was no significant difference between the number of burrows recorded in impact and reference sites. Based on the desktop review, including a taxonomic re-assessment of Aganippe spiders collected at the TGM, and the results of the field survey, it is very doubtful that the planned monitoring program will be able to provide any information on potential impacts of the mining operations on SRE trapdoor spider populations. Therefore, it is recommended to discontinue the SRE trapdoor spider monitoring program that forms part of the Environmental Monitoring Strategy (EMS).
Phoenix Environmental Sciences (2016). Recommendations in relation to short-range endemic (SRE) invertebrates at Tropicana Gold Mine (TGM)	Phoenix Environmental Sciences conducted an intensive targeted survey for Aganippe trapdoor spiders at TGM in November and December 2015, as part of monitoring obligations committed to in TGM's EMS. This survey aimed to resolve the distribution of Aganippe sp. 4, a species that is currently known only from a single site close to the Operational Area of the TGM. A risk based assessment clearly indicates that an expansion of the Operational Areas as proposed does not present an unacceptable risk to the survival of *Aganippe* sp.4.
GHD (February 2016). Madras Prospect and Access Corridors Level 1 Flora and Fauna Surveys	Level 1 survey of the Madras project area. Survey recorded: • Malleefowl (Vulnerable at the time) • Rainbow Bee-Eater (Migratory at the time) • Sandhill Dunnart (Endangered at the time) • Australian Bustard (Priority 4 at the time) • Southern Marsupial Mole (Priority 4 at the time) • Brush tailed mulgara (Priority 4 at the time) • Woma Python (Priority 1 at the time)
Adaptive NRM (November 2018) Potential Impacts on Night Parrots of Habitat Disturbance Relating to Powerline Construction for Tropicana Gold Mine	Review of potential habitat for Night Parrots associated with a powerline at TGM. Roosting and breeding habitats for Night Parrots are *Triodia* species with ring forming growth habits. *Triodia basedowii* present at TGM can form suitable roosting and breeding habitat) However for the area investigated (near the TSF) the *T. basedowii* has not developed the large complex structure required by Night Parrots. The presence of trees and shrubs in the area make the habitat unsuitable for breeding habitat based on current understanding of preferred habitat. Vegetation at TGM does not support feeding habitat requirements either. The study concluded it was extremely unlikely that Night Parrots would be affected in the area.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Kingfisher (December 2020) Fauna Assessment of Tropicana Gold Mine	Kingfisher undertook a survey of the operational area due to proposed expansions to the mining area. Survey recorded: • Sandhill Dunnart (Endangered at the time) • Malleefowl (Vulnerable at the time) • Brush tailed mulgara (Priority 4 at the time) • Southern Marsupial Mole (Priority 4 at the time) • Straited Grasswren (Priority 4 at the time)
Phoenix Environmental Sciences (2020). Short-range Endemic Invertebrate Desktop Review for the Tropicana Gold Mine Project	The desktop review returned a total of 385 records of at least 57 distinct taxa. Of these, 39 are of Potential SRE status and 18 are of Uncertain SRE status. The SRE assemblage is dominated by trap-door spiders (40 taxa), with the remaining orders being represented by between four and six taxa. Based on vegetation mapping, the study area contains five vegetation types considered to have High potential to support SREs and nine vegetation types considered to have Low potential. Much of the habitat with a High potential to support SRE taxa is well represented within the study area but poorly represented outside it, making these vegetation types important to the persistence of SREs. The conclusion of this review is that expansion of the Project footprint has the potential to negatively impact known SRE taxa and thus further surveys are warranted for two reasons: 1) the extremely high number of SRE taxa generally, but more importantly, high numbers known from single locations 2) the high number of taxa that have seen their known locations significantly reduced, and in one case completely lost, since 2009.
Kingfisher (March 2021) Tropicana Gold Mine Great Desert Skink Survey	Kingfisher undertook a survey of the operational area due to proposed expansions to the mining area. Kingfisher undertook the survey after the Great Desert Skink was recorded approximately 2.5 km west of the Operational Area lease boundary, representing an undocumented and southern extension to the species range. Survey Recorded: • Malleefowl (Vulnerable at the time) • Brush tailed mulgara (Priority 4 at the time) • Great Desert Skink (Vulnerable at the time)
Phoenix Environmental Sciences (2021). A history of Kwonkan 'sp.16'	Kwonkan sp. '16' is recorded from sites FRG015, TROP03 and TROP05. It is possible that K. sp. 1 has been reclassified as K. sp. '16', with this species being recorded from sites Trop03 and Trop05 possibly Memo report representing the same specimens of K. sp. 1 specimens listed in their report from 'T3' and 'T5' in Ecologia 2009 report. The specimen T129731 from site FRG015 (F15) appears additional to these records and is also not mentioned in the report. The report does not provide WAM registration numbers or client registration numbers and it is therefore uncertain if these samples are the same specimens. The possibility that specimens originally classified as Kwonkan sp. 1 have now been reclassified as K. sp. 16 or K. sp. indet. seems plausible.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Phoenix Environmental Sciences (2021). Short-range Endemic Invertebrate survey for the Tropicana Gold Mine	Phoenix was commissioned by AGAA to assess potential expansion options and facilitate potential environmental approvals at TGM. The majority of the study area (SA) is considered Low Potential SRE habitat, and so there does not appear to be significant biogeographical barriers to dispersal. Analysis of habitats and current distributions indicate many of these species have wider distributions than is currently known, however, they still may be limited to particular habitats or habitat associations such as vegetation communities and soils. It is therefore considered likely the majority of the known taxa have greater distributions than is currently recognized, including those from previously cleared areas, where previous habitat mapping is contiguous with, and is the most widespread habitat type, extending beyond the SA.
Phoenix Environmental Sciences (2024). Short-range endemic and significant invertebrate desktop assessment for the Mine Area North at TGM	In August 2023, Phoenix Environmental Sciences Pty Ltd (Phoenix) was commissioned by AGAA to undertake a Short-range endemic (SRE) invertebrate fauna desktop assessment of the Madras prospect for the TGM. The purpose of the desktop assessment is to assess the potential presence of SRE and significant invertebrate fauna within the study area and inform the potential for field surveys in 2024. Based on existing vegetation mapping and land system mapping, no High Potential SRE habitats such as habitat isolates, are known to occur in the study area, however, previous surveys undertaken at the TGM indicate the high endemicity. As the impact area is unknown, the extent of impact cannot currently be determined, however a SRE survey is recommended to be undertaken to understand the SRE invertebrate assemblages and distributions within the study area.
Subterranean Fauna	
Ecologia (July 2009) Tropicana Gold Project Stygofauna Survey Operational Area	Stygofauna survey across the Operational Area and several regional bores conducted in September 2007, November 2007 and April/May 2008. No stygobitic species were recorded, although several non-stygobitic species were collected including two troglofauna. Risk of impacts to stygofauna in the Operational Area considered to be low. Lack of stygofauna hypothesised to be due to a historical geological event, specifically a marine incursion followed by sediment deposition decreasing available habitat for stygofauna – similar to that which has occurred in the Nullarbor.
Ecologia (July 2009) Tropicana Gold Project Troglofauna Survey Report Phases 1-4	Troglofauna survey across the Operational Area conducted in four phases, September-November 2007, April-June 2008, August-October 2008 and October-December 2008. Habitat assessment suggested Operational Area not very prospective for troglofauna due to no evidence of cavitates or voids in the 40-50 m layer of weathered material. Survey conducted as recent examples of troglofauna found in a range of geologies previous thought to be not suitable for troglofauna. Two troglofauna were recorded during a contemporaneous stygofauna sampling (isopod and centipede). Whilst no species found in Phase 1, Phases 2-4 recorded further isopods and a single dipluran. Most likely habitat hypothesised to be small voids left by decayed roots.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Ecologia (July 2009) Tropicana Gold Project Troglofauna Survey Report Addendum Phase 5 Additional Survey Results	Survey conducted outside of the proposed footprints of the project. Despite extensive surveying no troglofauna species were recorded in this survey.
Louisa Lawrance and Associates (July 2009) Tropicana Gold Project Review of Local and Regional Regolith Types and Distribution as Potential Troglofauna Habitat	Investigation following recording of troglofauna species to determine geologies suitable for habitation. The review found the only realistic habitat was in less indurated friable areas underneath duricrust exposures which host interconnected interstitial voids, root casts and solution pipes.
Subterranean Ecology (June 2009) Minigwal Trough Water Supply Area Pipeline Corridor	Stygofauna desktop and pilot study of the Process Water Supply Borefield area conducted in May 2008. Study recorded no stygofauna which was consistent with the desktop review. Concluded the lower sandstone aquifer of the Minigwal trough is not highly prospective for stygofauna.
Ecologia (March 2010). Tropicana Gold Project Troglofauna Survey Phases 6 and 7	Additional troglofauna survey conducted from outside the proposed disturbance footprint in August-September 2009 (Phase 6) and November 2009 - January 2010. Phase 6 did not record any troglofauna Phase 7 recorded one additional troglobitic species (cockroach) and one species previously recorded (Isopod) Thus over 7 phases 14 individuals from 4 troglobitic species were recorded, suggesting the troglobitic community in the region is very sparse. Building from the geological interpretation from Louisa Lawrance and Associates (2009), suitable habitat for troglofauna is expected to be 16,670 ha of the 27241 ha Operational Area development envelope. Favourable habitat for troglofauna is expected to extend beyond the Operational Area development envelope.
Phoenix Environmental Sciences (2020). Stygofauna pilot survey and subterranean fauna risk assessment for Kamikaze Borefield at the Tropicana Gold Mine	In December 2019, Phoenix Environmental Sciences Pty Ltd was commissioned by AGAA to undertake a 1) stygofauna pilot sampling study and 2) subterranean fauna risk assessment for the impact of the Kamikaze borefield at TGM. Following an initial review in 2019, a pilot stygofauna survey was conducted sampling 12 bores from the Kamikaze aquifer and did not record any stygofauna. These results affirmed the findings of the previous desktop review. As there is likely to be an absence of stygofauna inhabiting the Kamikaze borefield, the abstraction of groundwater is unlikely to adversely impact on subterranean ecological communities. Guidance from the EPA states that if subterranean fauna is not found, it is not an environmental factor and no further surveys are required.

Study	Summary/Key Findings Related to Conservation Significant Fauna
Phoenix Environmental Sciences (2023). Subterranean fauna desktop assessment for the Madras prospect at the Tropicana Gold Mine	In August 2023, Phoenix Environmental Sciences Pty Ltd (Phoenix) was commissioned by AGAA to undertake a subterranean fauna desktop assessment of the Madras prospect for the TGM. The purpose of the desktop assessment is assessing the potential presence of subterranean fauna at the Madras prospect and to inform the potential for field surveys in 2024. No stygofauna records were identified from within the desktop search area. Four troglofauna taxa, identified to Class and Order level were found from an intensive survey undertaken at the TGM, and 3 taxa from Mulga Rock, located 100 km west of the TGM. Stygofauna and troglofauna are both expected to occur at Madras and so recommendations to complete detailed surveys to determine species presence, assemblage and distributions are given.
Phoenix Environmental Sciences (2023). Subterranean fauna desktop assessment for the Mine Area North at TGM	In August 2023, Phoenix Environmental Sciences Pty Ltd (Phoenix) was commissioned by AGAA to undertake a subterranean fauna desktop assessment for Mine Area North at the TGM. The purpose of the desktop assessment is to assess the potential presence of subterranean fauna at the Mine Area North and inform the potential for field surveys in 2024. The impact area is currently not known, so impacts cannot be adequately assessed however, a basic survey is recommended to confirm troglofauna presence or absence, particularly in areas where the proposed impact area intersects sandy or coarser colluvium, or outcropping basement rock. Depending on the location and scale of the impact area, this recommendation may be reviewed.

9 Appendix 2: Changes in Conservation Status or Occurrence of Flora Across the TGP

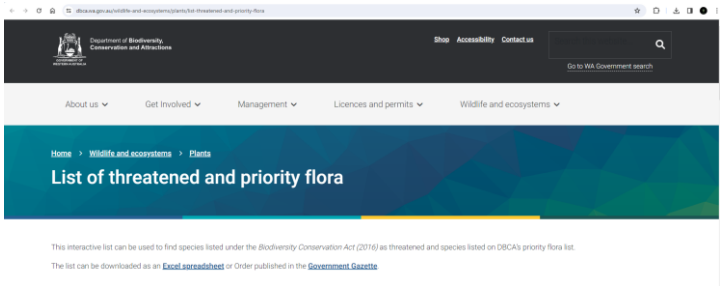
Species	2014 TSCMS Conservation Status		June 2023 Conservation Status	
	WA	Commonwealth	WA	Commonwealth
Acacia eremophila numerous nerved variant	P3	-	P3	-
Acacia eremophila var. variabilis	P3	-	P3	-
Alyogyne sp. Great Victoria Desert			Delisted	Delisted
Baeckea sp. Sandstone	P3	-	P3	-
Caesia talingka	P2	-	P2	-
Calytrix warburtonensis			P2	-
Caustis Deserti			P3	-
Comesperma viscidulum	P4	-	P4	-
Conospermum toddii	P4	-	P4	-
Dampiera eriantha	P1	-	P2	-
Dicrastylis cundeeleensis	P4	-	P4	-
Eremophila arachnoidea subsp. *Tenera*			P3	-
Eremophila perglandulosa	P1	-	Not recorded	
Eucalyptus articulata	DRF	VU	Not recorded	
Eucalyptus pimpiniana	P3	-	P3	-
Grevillea secunda	P4	-	P4	-
Hibbertia crispula	P2	VU	P1	VU
Isotropis canescens	P2	-	P2	
Labichea deserticola	P1	-	Not recorded	
Labichea eremea			P3	-
Lechenaultia divaricata	P1	-	Excluded name	
Lechenaultia aphylla			P1	-
Malleostemon sp. Officer Basin	P2	-	P2	-
Melaleuca nanophylla	P3	-	Not recorded	
Micromyrtus serrulata	P3	-	P3	-
Minuria tridens	P1	-	Not recorded	

Species	2014 TSCMS Conservation Status		June 2023 Conservation Status	
	WA	Commonwealth	WA	Commonwealth
Olearia arida	P4	-	P4	-
Physopsis chrysotricha	P2	-	Recorded outside of survey area	
Thryptomene eremaea	P2	-	P2	-
Thryptomene wittweri	DRF	VU	Not recorded	
Thysanotus baueri	P1	-	Not recorded	
Trachymene pyrophila	P2	-	P2	-
Vittadinia pustulata			P3	-

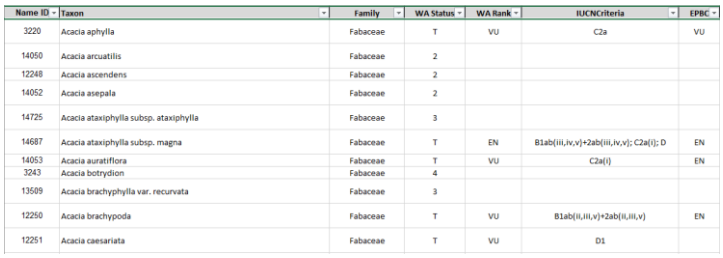
Methodology for Updating Table 2 (Threatened Flora)

DBCA

- Open the following link https://www.dbca.wa.gov.au/threatened-species-list-flora
- Download the excel spreadsheet (these are usually updated annually in October)



- Search for each species in the main list sheet (first sheet in the excel file)
- Look at the WA status (and WA Rank if the status is Threatened) and the EPBC value.



Name ID	Taxon	Family	WA Status	WA Rank	IUCNCriteria	EPBC
3220	Acacia aphylla	Fabaceae	T	VU	C2a	VU
14050	Acacia arcuatilis	Fabaceae	2			
12248	Acacia ascendens	Fabaceae	2			
14052	Acacia asepala	Fabaceae	2			
14725	Acacia ataxiphylla subsp. ataxiphylla	Fabaceae	3			
14687	Acacia ataxiphylla subsp. magna	Fabaceae	T	EN	B1ab(iii,iv,v)+2ab(iii,iv,v); C2a(i); D	EN
14063	Acacia auratiflora	Fabaceae	T	VU	C2a(i)	EN
3243	Acacia botrydion	Fabaceae	4			
13509	Acacia brachyphylla var. recurvata	Fabaceae	3			
12250	Acacia brachypoda	Fabaceae	T	VU	B1ab(ii,iii,v)+2ab(ii,iii,v)	EN
12251	Acacia caesariata	Fabaceae	T	VU	D1	

- Update Current Conservations Status (adjust year) in Table 2 (EPBC value goes under commonwealth)

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2023)		Preferred Substrate
	Operational Area	Pinjin Corridor	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Acacia eremophila numerous nerved variant	✓	-	-	P3	-	P3	-	Sandy soils and flats.
Acacia eremophila var. variabilis	✓	-	-	P3	-	P3	-	Sandy or sandy loam.
Alyogyne sp. Great Victoria Desert	-	✓	-	-	-	P3	-	Orange sand on flat plain (AOLA Occurrence Record Perth 9246541)

EPBC

- Open the following link: https://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=flora
- Using Ctrl+F search the page for each species in Table 2. A lot of them won't be in the list but we don't know which ones may have changed during the year.

- Once you have found one in the list scroll up to see which category it is in.

- Update Current Conservations Status (adjust year) in Table 2 (EPBC value goes under commonwealth)

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2023)		Preferred Substrate
	Operational Area	Pinjin Corridor	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Acacia eremophila numerous nerved variant	✓	-	-	P3	-	P3	-	Sandy soils and flats.
Acacia eremophila var. variabilis	✓	-	-	P3	-	P3	-	Sandy or sandy loam.
Alyogyne sp. Great Victoria Desert	-	✓	-	-	-	P3	-	Orange sand on flat plain (AOLA Occurrence Record Perth 9246541)

10 Appendix 3: Change in Conservation Status or Expected Occurrence of Fauna Across the TGP

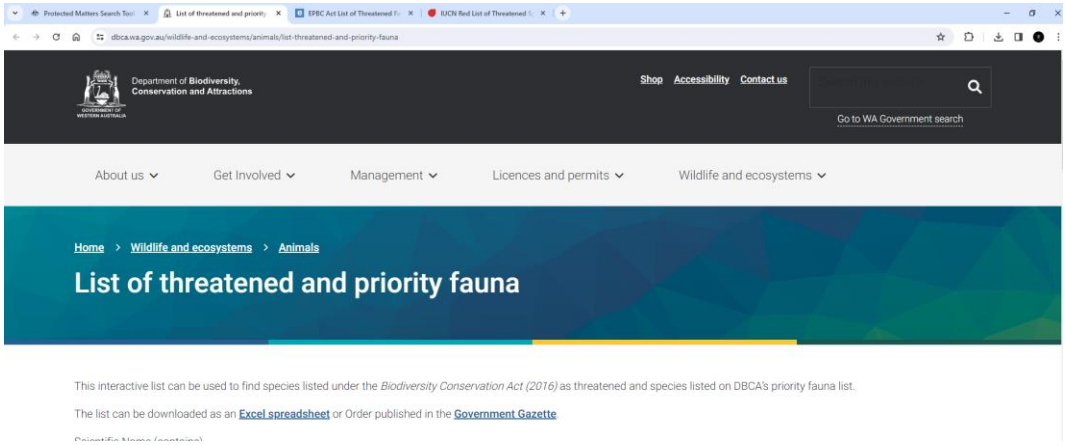
Species	2014 TSCMS Conservation Status		June 2023 Conservation Status	
	WA	Commonwealth	WA	Commonwealth
Bilby - *Macrotis lagotis*	S1	VU	Not recorded or Expected	
Central Long-eared Bat - *Nyctophilus* sp. (previously *N. timoriensis)*	P4	-	P3	-
Chuditch - *Dasyurus geoffroyii*	S1	VU	Not recorded or Expected	
Greater Stick-nest Rat - *Leporillus conditor* (locally extinct)	S1	VU	Not recorded or Expected (long abandoned nests located)	
Mulgara - Crested-tailed *Dasycercus cristicauda*	S1	VU	Not recorded or Expected	
Mulgara - Brush-tailed *Dasycercus blythi*	P4	-	P4	-
Numbat - *Walpurti Myrmecobius fasciatus*	S1	VU	Not recorded or Expected	
Sandhill Dunnart - *Sminthopsis psammophila*	S1	EN	EN	EN
Southern Marsupial Mole - *Notoryctes typhlops*	S1	EN	P4	Delisted
Australian Bustard -*Ardeotis australis*	P4	-	Delisted	
Crested Bellbird - *Oreoica gutturalis*	P4	-	Delisted	
Grey Falcon - *Falco hypoleucos*	S1	-	VU	VU
Major Mitchell's Cockatoo - *Cacatua leadbeateri*	S4	-	Delisted	
Malleefowl - *Leipoa ocellata*	S1	VU	VU	VU
Naretha Blue Bonnet - *Northiella haematogaster narethae*	S4	-	P4	-
Night Parrot - Pezoporus *occidentalis*	S1	EN	CR	EN
Peregrine Falcon - *Falco peregrinus*	S4	-	OS	-
Striated Grass wren - *Amytornis striatus striatus*	P4	-	P4	-

Species	2014 TSCMS Conservation Status		June 2023 Conservation Status	
	WA	Commonwealth	WA	Commonwealth
Western Grasswren - *Amytornis textilis textilis*	P4	-	P4	-
Princess Parrot *Polytelis alexandrae*	S1	VU	P4	VU
Cattle Egret *Ardea ibis*	MI	-	Delisted	
Common Greenshank - *Tringa nebularia*	MI	-	MI	MI
Fork-tailed Swift - *Apus pacificus*	MI	-	MI	MI
Great Egret, White Egret - *Ardea alba*	MI	-	Delisted	
Oriental Plover, Oriental Dotterel - *Charadrius veredus*	MI	-	MI	MI
Rainbow Bee-eater - *Merops ornatus*	MI	-	Delisted	
Wood Sandpiper - *Tringa glareola*	MI	-	MI	MI
South-Western Carpet Python – *Morelia spilota imbricata*	S4	-	Delisted	
Great Desert Skink - *Liopholis kintorei* (*Egernia kintorei*)	S1	VU	VU	VU
Dotty Tailed Robust Slider - *Lerista puncticauda*	P2	-	P2	-
Woma Python - *Aspidites ramsayi*	S4	-	P1	-
Southern Whiteface (*Aphelocephala Leucopsis*)	-	-	-	VU
Curlew Sandpiper (*Calidris ferruginea*)	-	-	CR	CR/MI
Buff-snouted Blind Snake (*Anilion maragaretae_*	-	-	P2	-
Long-tailed Dunnart (*Sminthopsis longicaudata*)	-	-	P4	-

Methodology for Updating Table 3 (Threatened Fauna)

DBCA

- Open the following link https://www.dbca.wa.gov.au/threatened-species-list-fauna
- Download the Excel spreadsheet (these are usually updated annually in October).



- Search for each species in the main list sheet (first sheet in the excel file)
- Look at the WA Listing and the National Listing value.

Scientific name	Common name	Class	WA listing	National listing
Abebaioscia troglodytes	Pannikin Plain Cave isopod	INVERTEBRATE	VU	
Acanthophis antarcticus	southern death adder	REPTILE	P3	
Acercella poorginup	Poorginup Swamp watermite	INVERTEBRATE	P2	
Acizzia mccarthyi	McCarthy's plant-louse	INVERTEBRATE	VU	
Acizzia veski	Vesk's plant-louse	INVERTEBRATE	VU	
Acrocephalus orientalis	oriental reed-warbler	BIRD	MI	MI
Actitis hypoleucos	common sandpiper	BIRD	MI	MI
Aipysurus apraefrontalis	short-nosed seasnake	REPTILE	CR	CR
Aipysurus foliosquama	leaf-scaled seasnake	REPTILE	CR	CR

- Update Current Conservation Status (adjust year) in Table 2 (National Listing value goes under commonwealth)

Table 3: Conservation Significant Fauna Recorded or Expected to Occur in and around the Project's Development Envelope

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2023)		Habitat Notes
	Operational Area	Pinjin Corridor	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Central Long-eared Bat - *Nyctophilus major tor.* (previously *N. timoriensis*)	✓	-	-	P4	-	P3	-	Often found in heavy Eucalypt woodlands and tall woodlands of the Coolgardie IBRA region with a tall shrub understorey of *Melaleuca lanceolata, M. pauperiflora, M. quadrifaria*, and *Eremophila sp., N. timoriensis* is less common in open woodlands.
Mulgara - Brush-tailed *Dasycercus blythi*	✓	-	✓	P4	-	P4	-	The main vegetation in inhabited areas, specifically *Triodia basedowii*, provides refuge from the heat and cover for the entrance to their burrows. Mulgara live in burrows which they dig on the flats between low sand-dunes or on the lower edges of dunes.
Sandhill Dunnart - *Sminthopsis psammophila*	✓	-	✓	S1	EN	EN	EN	Sandhill Dunnarts prefer sandy soils, typically low parallel sand dune habitat with a diverse understorey and a ground cover of Spinifex (*Triodia*). Spinifex size is variable in preferred habitat; dunnarts show a preference for large hummocks approximately 40 cm high and 70 - 100 cm diameter as nest sites. Other vegetation in preferred habitats varies but is most commonly Mallee or Marble Gum (*Eucalyptus gongylocarpa*), often with *Callitris verrucosa* and a complex shrub understorey.

EPBC

- Open the following link https://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=fauna
- Using Ctrl+F search the page for each species in Table 3. A lot of them won't be on the list but we don't know which ones may have changed during the year.

- Once you have found one that is in the list scroll up to see which category it is in.

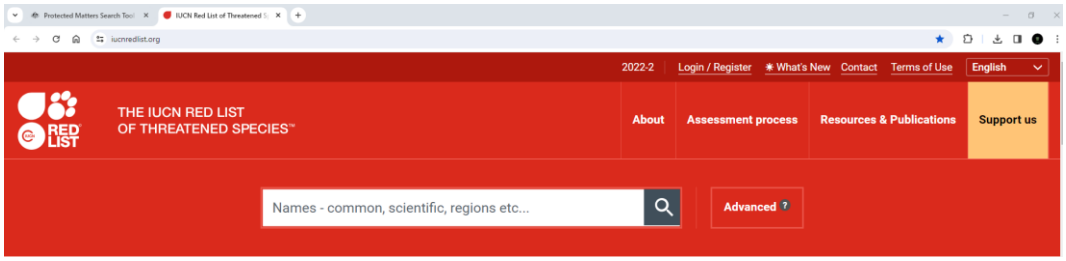
- Update the Current Conservation Status (adjust year) in Table 3 (EPBC value goes under commonwealth)

Table 3: Conservation Significant Fauna Recorded or Expected to Occur in and around the Project's Development Envelope

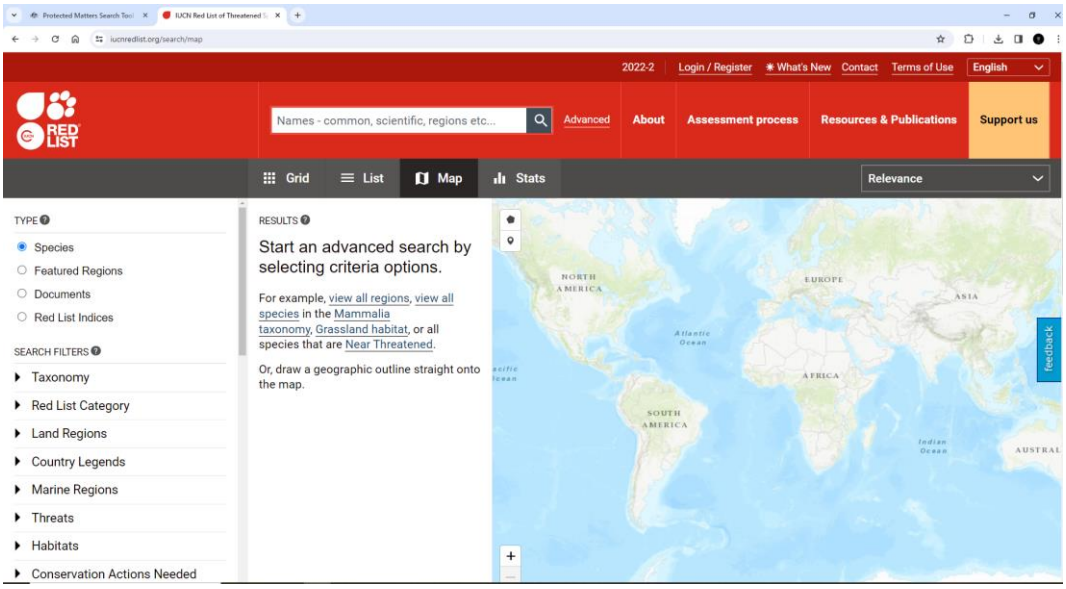
Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2023)		Habitat Notes
	Operational Area	Pinjin Corridor	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Central Long-eared Bat - *Nyctophilus major tor.* (previously *N. timoriensis*)	✓	-	-	P4	-	P3	-	Often found in heavy Eucalypt woodlands and tall woodlands of the Coolgardie IBRA region with a tall shrub understorey of *Melaleuca lanceolata, M. pauperiflora, M. quadrifaria*, and *Eremophila sp., N. timoriensis* is less common in open woodlands.
Mulgara - Brush-tailed *Dasycercus blythi*	✓	-	✓	P4	-	P4	-	The main vegetation in inhabited areas, specifically *Triodia basedowii*, provides refuge from the heat and cover for the entrance to their burrows. Mulgara live in burrows which they dig on the flats between low sand-dunes or on the lower edges of dunes.
Sandhill Dunnart - *Sminthopsis psammophila*	✓	-	✓	S1	EN	EN	EN	Sandhill Dunnarts prefer sandy soils, typically low parallel sand dune habitat with a diverse understorey and a ground cover of Spinifex (*Triodia*). Spinifex size is variable in preferred habitat; dunnarts show a preference for large hummocks approximately 40 cm high and 70 - 100 cm diameter as nest sites. Other vegetation in preferred habitats varies but is most commonly Mallee or Marble Gum (*Eucalyptus gongylocarpa*), often with *Callitris verrucosa* and a complex shrub understorey.

IUCN Red List

- Open the following link https://www.iucnredlist.org/
- On the home page select Advanced next to the search bar

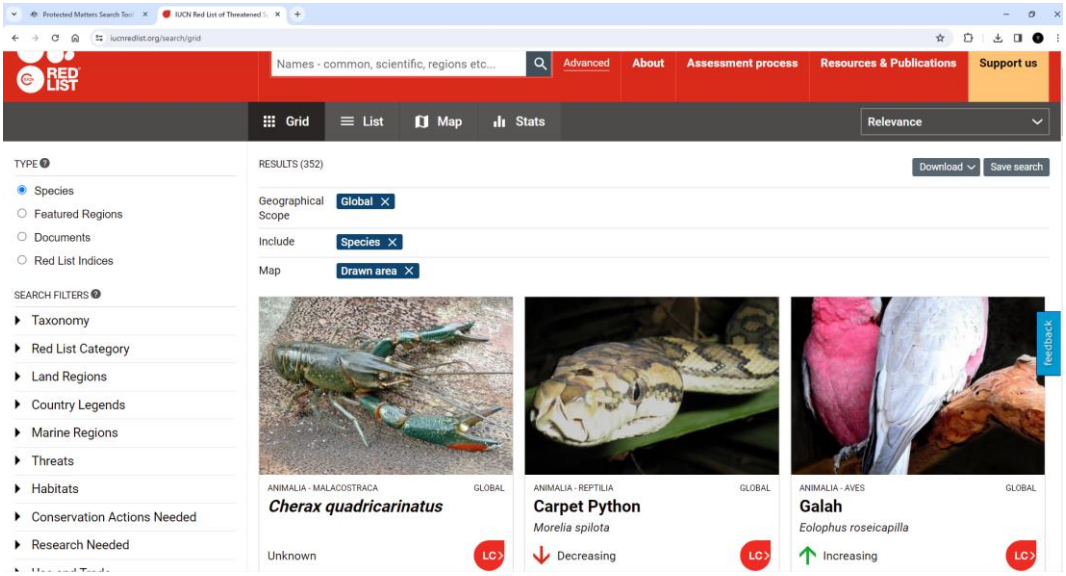


- Select the Map tab on the IUCN page



- Pan to the area you wish to inspect.
- Select the polygon drawing tool (red box on image below) and draw out the area you wish to get results for, once you have pressed all corners select finish and the polygon will close.

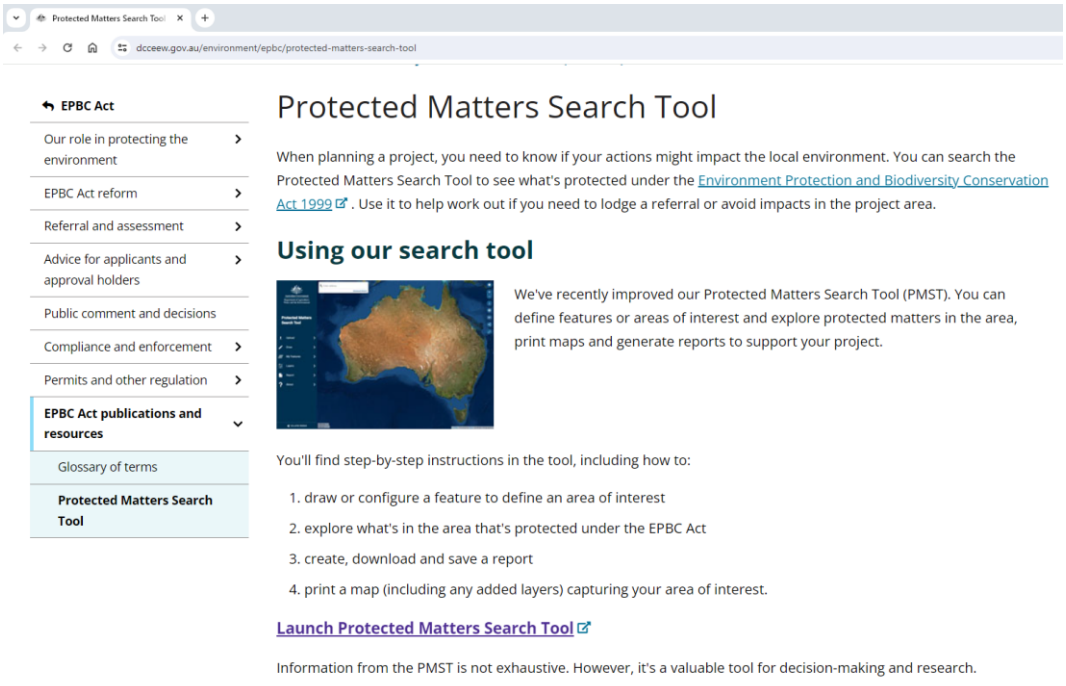
- Once you shape is drawn swap back to the Grid tab. This will provide a list of all species known/likely to be in or visit the area.



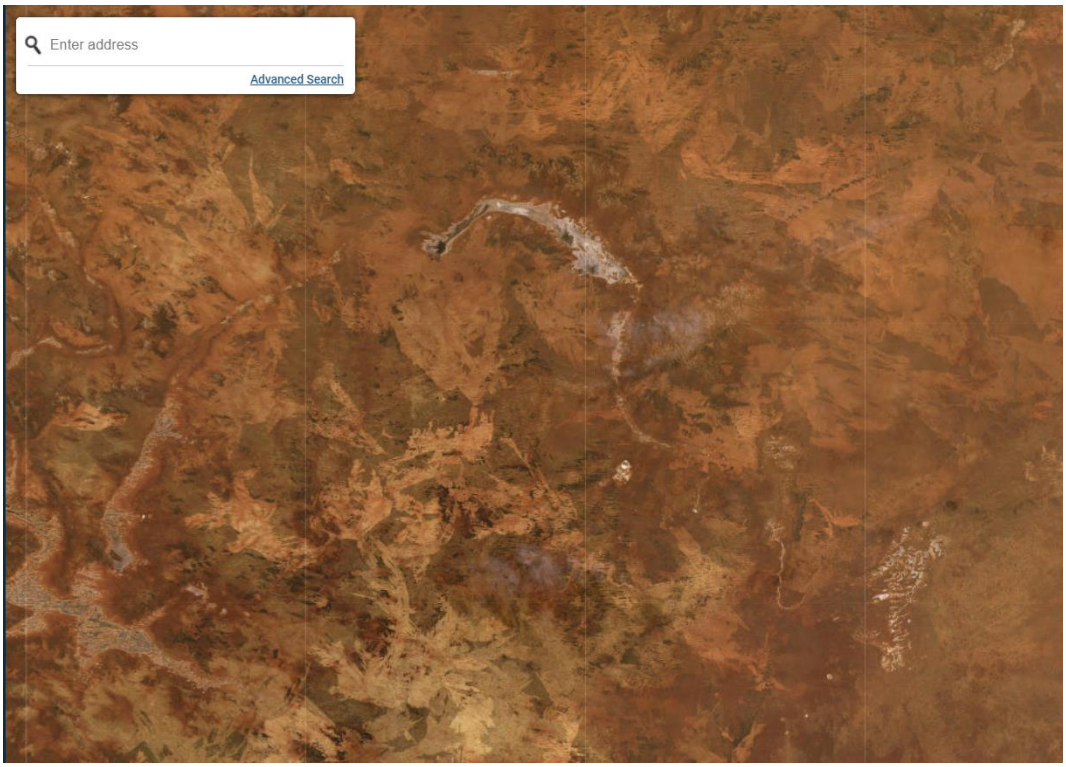
- Search through the list to make sure all species categorised as vulnerable, endangered or critically endangered are included in Table 3.

DCCEEW

- Open the following link https://www.dcceew.gov.au/environment/epbc/protected-matters-search-tool
- Launch Protected Matters Search Tool

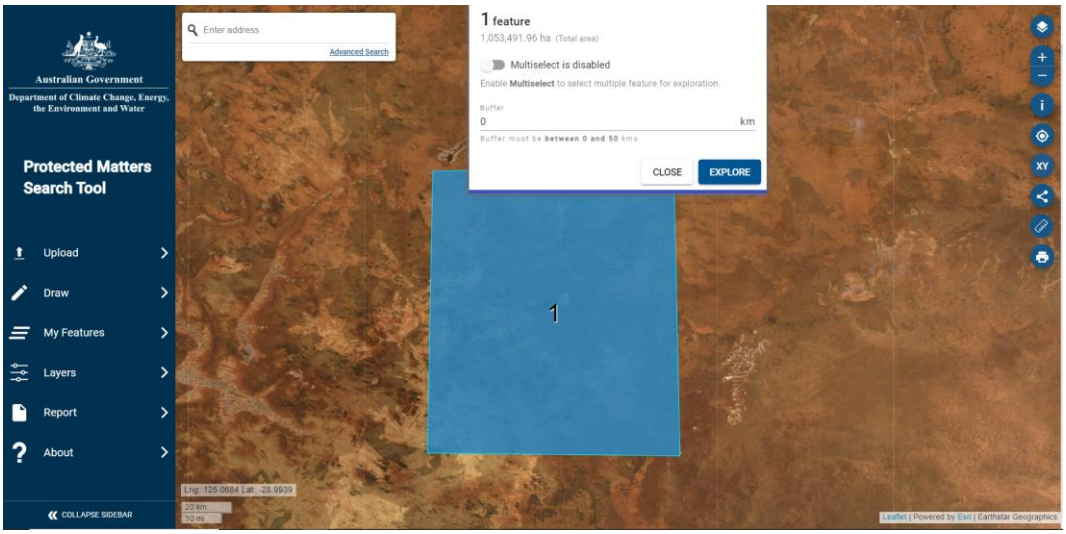


- Zoom to the area you want to inspect.



- Draw a polygon around the area you want to inspect.

- Click on the polygon and select explore.



- Search through the results and double check to make sure all migratory and threatened species are added to Table 3.

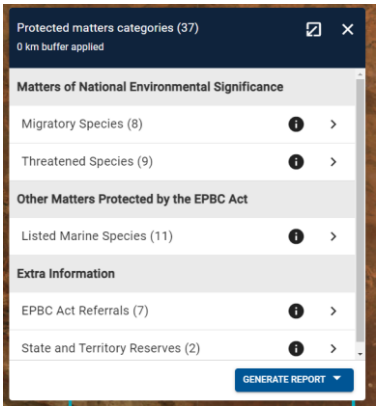


Table 3: Conservation Significant Fauna Recorded or Expected to Occur in and around the Project's Development Envelope

Species	Area Located or Expected			Conservation Status at the Time of the PER (2009)		Current Conservation Status (2023)		Habitat Notes
	Operational Area	Pinjin Corridor	Water Supply Area	WA	Commonwealth	WA	Commonwealth	
Central Long-eared Bat - *Nyctophilus major tor.* (previously *N. timoriensis*)	✓	-	-	P4	-	P3	-	Often found in heavy Eucalypt woodlands and tall woodlands of the Coolgardie IBRA region with a tall shrub understorey of *Melaleuca lanceolata*, *M. pauperiflora*, *M. quadrifaria*, and *Eremophila* sp., *N. timoriensis* is less common in open woodlands.
Mulgara - Brush-tailed *Dasycercus blythi*	✓	-	✓	P4	-	P4	-	The main vegetation in inhabited areas, specifically *Triodia basedowii*, provides refuge from the heat and cover for the entrance to their burrows. Mulgara live in burrows which they dig on the flats between low sand-dunes or on the lower edges of dunes.
Sandhill Dunnart - *Sminthopsis psammophila*	✓	-	✓	S1	EN	EN	EN	Sandhill Dunnarts prefer sandy soils, typically low parallel sand dune habitat with a diverse understorey and a ground cover of Spinifex (*Triodia*). Spinifex size is variable in preferred habitat; dunnarts show a preference for large hummocks approximately 40 cm high and 70 - 100 cm diameter as nest sites. Other vegetation in preferred habitats varies but is most commonly Mallee or Marble Gum (*Eucalyptus gongylocarpa*), often with *Callitris verrucosa* and a complex shrub understorey.

11 Appendix 4: Breeding/Nesting Season of Fauna Species

Species	Species Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Central Long-eared Bat	*Nyctophilus sp.*	Unknown											
Mulgara - Brush-tailed	*Dasycercus blythi*					Winter months							
Sandhill Dunnart	*Sminthopsis psammophila*									Spring and early summer			
Southern Marsupial Mole	*Notoryctes typhlops*	Unknown											
Common Greenshank	*Tringa nebularia*	Breeds abroad											
Grey Falcon	*Falco hypoleucos*												
Malleefowl	*Leipoa ocellata*												
Naretha Blue Bonnet	*Northiella haematogaster narethae*							And after rain					
Peregrine Falcon	*Falco peregrinus*												
Striated Grass wren	*Amytornis striatus striatus*												

Species	Species Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Princess Parrot, Alexandra's Parrot	*Polytelis alexandrae*									And after rain			
Fork-tailed Swift	*Apus pacificus*	Breeds abroad											
Oriental Plover, Oriental Dotterel	*Charadrius veredus*	Breeds abroad											
Wood Sandpiper	*Tringa glareola*	Breeds abroad											
Great Desert Skink	*Liopholis kintorei*												
Southern Desert skink	*Lerista puncticauda*	Unknown											
Woma Python	*Aspidites ramsayi*												

	Normal Breeding times
	Breeds abroad
	Unknown
	No breeding activity expected

12 Appendix 5: Summary of Changes Between the 2014 TSCMP and 2024 TSCMP

2014 Threatened Species and Communities Management Strategy Section	2024 Threatened Species and Communities Management Plan Section	Comments
Overall document	Restructured to fit to the EPA Management Plan template	From consultation with DWER.
1 Overview	1 Context Scope and Rationale	Removed management system framework information
2 Purpose		Focuses the plan on the TGM proposal, relevant environmental factors, key conditions of approval and the most critical species (Threatened), whilst maintaining observance of priority species/ecological communities and subterranean fauna
3 Scope and Review Protocols	Scope = 1 Context Scope and Rationale Review = 3 Adaptative Management and Review and 4 Stakeholder Consultation	Review and stakeholder consultation in sections 3 and 4 respectively consistent with the EPA Management Plan template
4 Background	1.4 Rationale and Approach	Summary of studies has been provided in Appendix A as a consequence of the large number of studies
5 Legal Requirements	1.3 Condition Requirements	Sharper focus
6 Regional Setting		Deleted
7 Flora of Conservation Concern	1.4 Rationale and Approach	Flora tables combined to present conservation status, area located or expected and preferred substrate Species status updated following review of data by Mattiske Consulting Pty Ltd
8 Fauna of Conservation Concern	1.4 Rationale and Approach	Fauna tables merged to see conservations status, area located or expected and preferred habitat Species status updated
9 Putative Short-Range Endemics		Deleted to keep focus on values and key environmental factors
10 Subterranean Fauna	1.4 Rationale and Approach	Removed after EPA RFI recommendations (December 2024)
11 Ecological Communities	1.4 Rationale and Approach	Updated to reflect change in PEC name and publication of PEC boundary (previously the full boundary had not been defined)
12 Risk Assessment		Deleted as does not fit with the management plan template

2014 Threatened Species and Communities Management Strategy Section	2024 Threatened Species and Communities Management Plan Section	Comments
13 Threats and Mitigations	2 Management Plan Provisions	Note strategies have required extensive review to fit into management provisions. Introduced outcome-based provisions
14 Training and Awareness	2 Management Plan Provisions	Incorporated into management provisions
15 Rehabilitation and Seed Banking	2 Management Plan Provisions	Incorporated into management provisions
16 Data Management and Incident Reporting	2.4 Reporting	Greater detail of reporting requirements
17 Measurement and Monitoring	2.3 Monitoring	Greater detail of monitoring
	General document changes	Updates to header names, spelling, grammar, formatting etc.

13 Appendix 6: Trigger, Threshold and Management Action Review

Complexity of changes		Minor revisions X	Moderate revisions	Major revisions
Number of Key Environmental Factors		One	2-3	> 3 X
Date revision submitted to EPA: 25/09/2024				
Proponent's operational requirement timeframe for approval of revision Reason for Timeframe: 3 years as outlined in the Ministerial Statement.			< One Month < Six Months	> Six Months X None
Item no.	EMP section no.	EMP page no.	Summary of change	Reason for change
1.	4.1 (Table 4)	29/31	Trigger criteria have been added to the table.	Added to bring the table in line with the 2024 EPA EMP guidance documentation.
2.	4.1 (Table 4)	29/31	Trigger level actions have been added to the table.	
3.	4.1 (Table 4)	29/31	Timings and frequency of monitoring activities have been added to the table	
4.	4.1 (Table 4)	29/31	Indicators have been added to the monitoring cells along with additional monitoring activities relevant to the trigger criteria.	
5.	4.1 (Table 4)	29/31	Justifications have been added for the trigger level actions and the threshold contingency actions.	Added as a part of the response to the EPA's RFI APP-0025695
6.	4.1 (Table 4)	29/31	Disturbance totals for the operational area have been increased from 3,540ha to 3,650ha.	Updated as Attachment 7 to Ministerial Statement 839 increased the disturbance area limit of the operation area from 3,540ha to 3,650ha.
7.	4.2 (Table 5)	33	Management objectives have been updated to make is clear that we are managing Threatened or other conservation significant flora, fauna and ecological communities.	Added as a part of the response to the EPA's RFI APP-0025695. AGA will manage priority species in the same way it does threatened species.

8.	4.2 (Table 5)	33	Objective 4 updated too “Minimise interaction of threatened or other conservation significant fauna with the TSF or tailings”.	TGM will manage the Threatened or other conservation significant flora, fauna and ecological communities in the unlikely event of loss of containment of tailings not just its storage facility.
9.	4.2 (Table 5)	34/40	Management Actions have been updated to make is clear that we are managing Threatened or other conservation significant flora, fauna and ecological communities.	Added as a part of the response to the EPA’s RFI APP-0025695. TGM will manage priority species in the same way it does threatened species.
10.	4.2 (Table 5)	34/40	Timings and frequency of monitoring activities have been added to the table	Added to bring the table in line with the 2024 EPA EMP guidance documentation.
11.	4.2 (Table 5)	34/40	Indicators have been added to the monitoring cells along with additional monitoring activities relevant to the trigger criteria.	
12.	4.2 (Table 5)	34/40	Monitoring methods have been reviewed and updated to include all current processes.	
13.	4.2 (Table 5)	34	Management target linked to objective 1 has been updated to “Minimise impacts to Threatened or other conservation significant species, ecological communities or their habitat within the approved areas.”	Updated as the objective is to minimise impact rather than state ‘no impact’. Updated to show that TGM are managing all key values Updated to clarify that management will be inside TGM’s approved areas
14.	4.2 (Table 5)	35	Management target linked to objective 2 has been updated to include “Feral animal populations will be controlled if they are found to be increasing”	Added as TGM undertakes control programs when they are required.
15.	4.2 (Table 5)	35	Management action linked to objective 2 has been updated to include “Feral animal population numbers will be monitored to provide indications of whether Feral animal control programs or trapping are required.	Added as the original actions talked more to reducing the likelihood of feral animals encroaching on the mine but did not talk how TGM would manage feral animals who still came in with those controls in place.

			Feral animal control programs and trapping to be undertaken if populations are deemed to be posing a risk"	
16.	4.2 (Table 5)	35	Management target linked to objective 3 has been updated to include drill holes and trenches.	Updated as the objective spoke to trenches and turkeys nests but the targets only spoke to turkeys nests.
17.	4.2 (Table 5)	38	Management target linked to objective 9 has been updated to include "Conservation status of Threatened and other conservation significant species and communities is maintained. New species are added to the lists if they gain a conservation status."	Updated as the original target did not speak to all key values, which have been updated to be more consistent in this version of the TSCMP. Updated to include commentary regarding newly listed species as there was no mention of our management of species that are classified between reviews.
18.	4.2 (Table 5)	39	Management target linked to objective 10 has been updated to include "No decline of vegetation health of threatened and other conservation significant flora communities inside the approved areas >25% due to excess dust"	Updated to talk to disturbance being inside our approved areas. Updated to provide a measurable target value which is in line with condition 5-3 of Ministerial Statement 839.
19.	4.2 (Table 5)	39	Management target linked to objective 10 has been updated to include "No introduction of new weed species and spread of known weed populations within the operations disturbance footprint as a result of the mining activities."	Updated to include "as a result of mining activities" as we are unable to stop the spread caused by feral animals and other parties traveling through the region. Updated to provide consistency with condition 9-4 of Ministerial Statement 839.
20.	4.2 (Table 5)	40	Management action linked to objective 10 has been updated to include "Workplace inspections will include a check for weeds in the work areas and actions to remove or treat weeds will be assigned to the responsible work areas. Exploration programs that are located or passing through weed infested areas to have stricter	Added to bring the actions undertaken by TGM in line with current processes.

			conditions relating to the cleanliness of their vehicles when leaving the weed impacted locations."	