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# Appendix C

## MNES Management Plan

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# **EVA COPPER MINE PROJECT**

## **MNES MANAGEMENT PLAN**

### **EVAMP001-EVA-EN-PLA-0032**

**EPBC Number: 2026/10587 and 2026/10616**

**DOCUMENT USERS** : ALL HARMONY  
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| Eva Copper Mine Project            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EPBC Number</b>                 | 2026/10587 and 2026/10616                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Project name</b>                | Eva Copper Mine Project                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Proponent</b>                   | Eva Copper Mine Pty Ltd (ABN 76 625 712 138)                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Action relevant to the plan</b> | <p>2026/10587 Stage 1 Referral Action: designed to support development of Critical Path Activities necessary to achieve commencement of mining operations, mineral processing and first production of copper concentrate from the Project.</p> <p>2026/10616 Stage 2 Referral Action: comprising the mining, processing, infrastructure, water management and energy infrastructure required to sustain the Project's long-term operation and copper concentrate production.</p> |
| <b>Location of the Action</b>      | North West Queensland, approximately 75 kilometres north-west of Cloncurry                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Date of plan preparation</b>    | 16 September 2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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## 1 INTRODUCTION

### 1.1 The Project

The Eva Copper Mine Project (the Project) is a metalliferous mining operation owned and operated by Eva Copper Mine Pty Ltd (ECMPL), a wholly owned subsidiary of Harmony Gold Mining Company Limited (Harmony). The Project is situated in North West Queensland, approximately 75 kilometres (km) north-west of Cloncurry and 95 km north-east of Mount Isa (Figure 1.1).

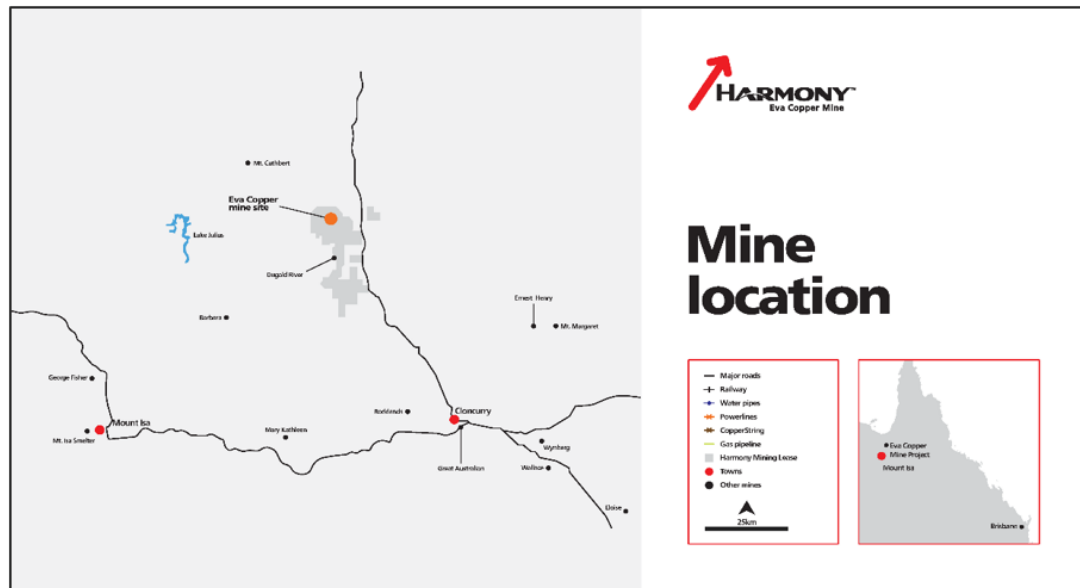


**Figure 1.1: Location of the Eva Copper Mine Project**

The Project comprises the extraction of 265 million tonnes (Mt) of sulphide and native copper ore using conventional drill and blast and truck and shovel mining methods. Mining will be undertaken across six mining areas being Little Eva, Blackard, Turkey Creek, Bedford, Lady Clayre and Scanlan. Little Eva and Blackard will provide (combined) 85% of the mining inventory for the Project.

The Project includes ancillary infrastructure comprising a Tailings Storage Facility (TSF), Waste Rock Dumps, Processing Plant, water production borefield, hybrid power plant setup and accommodation village.

The Project layout is shown in Figure 1.2.

The Project is approved under the *Environmental Protection Act 1994* and operates in accordance with Environmental Authority (EA) EPML00899613 issued by the Department of the Environment Tourism, Science and Innovation (DETSI).

Given the scale, complexity and critical path development sequencing of the Project, ECMPL have referred the Project under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) through a staged referral process.

The Stage 1 Referral Action (2026/10587) is designed to support development of Critical Path Activities necessary to achieve commencement of mining operations, mineral processing and first production of copper concentrate.

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The Stage 2 Referral Action (2026/10616) comprises Project elements beyond Critical Path Activities that are required to enable full development and operation of the Project over its Life of Mine Plan. The Stage 2 Referral Action includes the remaining mining, processing, infrastructure, water management, energy and rehabilitation components necessary to sustain long-term mining operations.

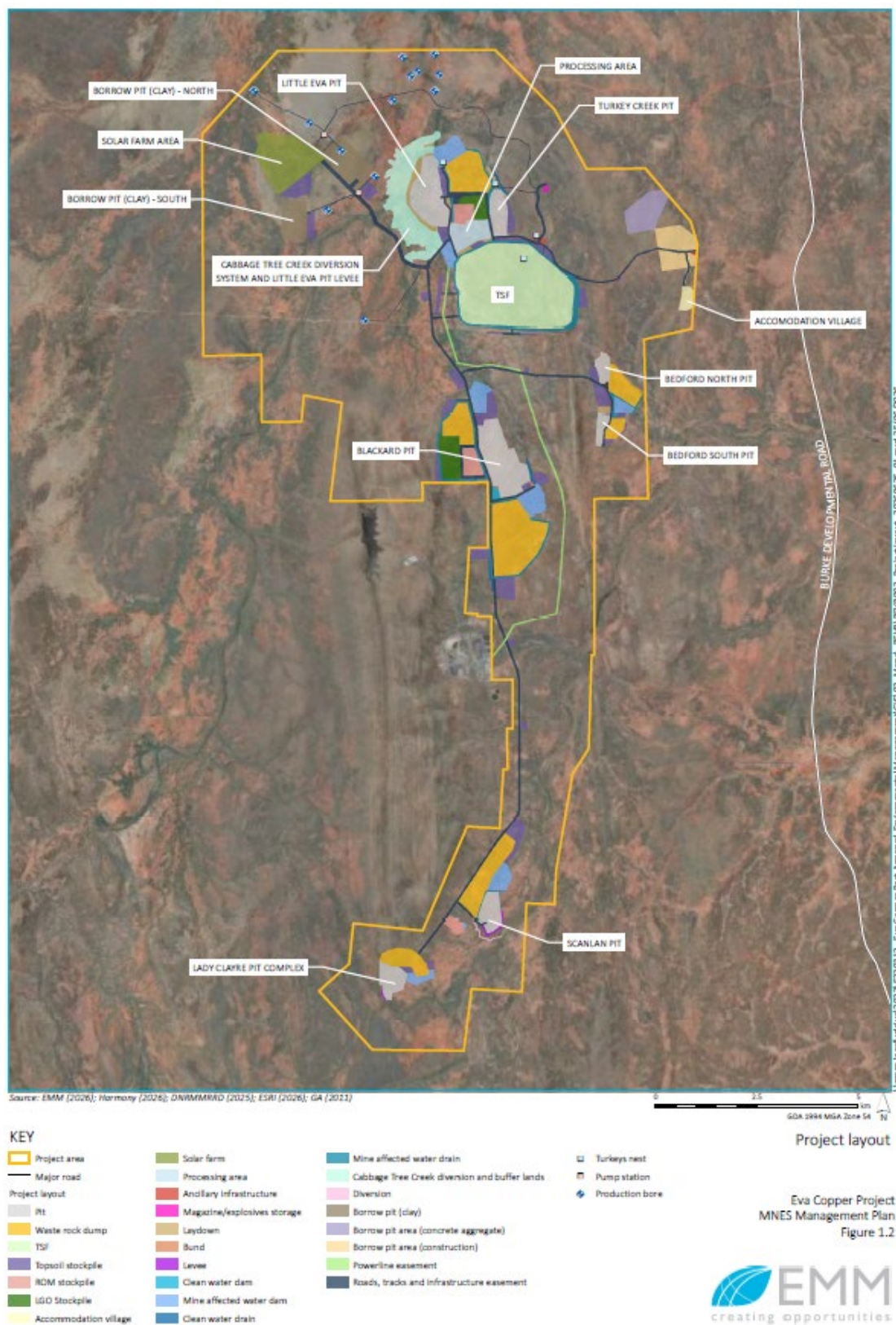


Figure 1.2: Project Layout

## 1.2 Objectives of this plan

This MNES Management Plan (Management Plan) has been prepared to outline the measures that will be implemented throughout the Project to avoid, minimise, mitigate and monitor potential impacts on MNES as defined and protected under the EPBC Act which are known to occur within the Project Area.

The Management Plan applies to all phases of the Project including vegetation clearing, construction, operations, closure and rehabilitation, and forms part of the Project's broader environmental management framework.

The MNES addressed by this Management Plan are:

- Mertens' Water Monitor (*Varanus mertensi*)
- Northern Blue-tongued Skink (*Tiliqua scincoides intermedia*)
- Painted Honeyeater (*Grantiella picta*)
- Fork-tailed Swift (*Apus pacificus*)

ECMPL is committed to implementing appropriate avoidance, mitigation and management measures to protect MNES throughout the life of the Project. This Management Plan identifies the management measures to be implemented, the performance criteria against which their effectiveness will be assessed, and the monitoring and adaptive management framework that will be applied to verify compliance and support continual improvement.

## 1.3 Relationships to other plans

The Management Plan forms part of the Project's broader environmental management framework and sets out the measures to avoid, minimise, mitigate and monitor potential impacts on MNES known to occur within the Project Area.

The following plans form annexures to this Management Plan and provide further detailed management measures for specific threats to MNES:

- Weed and Pest Management Plan (Annexure A)
- Cane Toad Management and Monitoring Plan (Annexure B)

The following management plans and monitoring programs support implementation of this Management Plan and should be read in conjunction where relevant:

- **Construction Environmental Management Plans** – Establish the overarching environmental management framework for construction activities, including environmental controls, management procedures, incident response, monitoring and compliance requirements to minimise environmental impacts.
- **High-risk Species Management Program** – Outlines procedures for identifying and managing risks to protected animal breeding places, including pre-clearance surveys, impact avoidance measures and species-specific management requirements.
- **Receiving Environment Monitoring Program** – Describes the monitoring of surface water quality and aquatic environmental values to assess potential Project-related impacts and verify the effectiveness of management measures.
- **Groundwater Monitoring Program** – Describes the monitoring of groundwater levels and groundwater quality to assess potential Project-related impacts and verify the protection of groundwater resources.

- **Groundwater Dependent Ecosystem (GDE) Monitoring Program** – Describes the monitoring regime proposed to monitor the potential effects of Project-related groundwater drawdown on identified at-risk GDEs.
- **Air Quality and Dust Monitoring Programs** – Describe the monitoring of ambient air quality, particulate matter and dust deposition to assess the effectiveness of air quality and dust management measures, demonstrate compliance with Environmental Authority requirements, and minimise impacts on surrounding environmental values and sensitive receptors.
- **Bushfire Management Plan** – Provides a framework for preventing, detecting and responding to bushfire risks associated with Project activities, thereby minimising the likelihood of unplanned fire ignition and altered fire regimes within the Project Area.

Beyond these environmental plans, provisions for emergency management are set out in the ECMPL Emergency Management Plan. Further detail is contained in Section 4.7.

#### 1.4 Roles and responsibilities

All personnel involved in the Project (including employees, contractors and subcontractors) are required to undertake activities in accordance with this Management Plan. The key roles and responsibilities associated with the Management Plan are outlined in Table 1.2.

**Table 1.1: Roles and Responsibilities**

| Position                                               | Responsibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Project Phase      |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| ECMPL Project Director and Site Senior Executive (SSE) | <ul style="list-style-type: none"> <li>• Allocate sufficient resources for the implementation of this Management Plan and ensure its application throughout the life of the Project.</li> <li>• Manage the construction, operation, and post mine rehabilitation phases of the Project.</li> <li>• Ensure that the requirements of any statutory approvals, legislation, and this Management Plan are implemented and clearly defined in contractual documentation of all contractors involved with the Project.</li> </ul> | All Project phases |
| ECMPL Health Safety & Environment (HSE) Manager        | <ul style="list-style-type: none"> <li>• Overall responsibility for implementation of this Management Plan</li> <li>• Ensure Project activities are undertaken in accordance with the requirements of this Management Plan.</li> <li>• Ensure personnel and contractors are aware of, and comply with, the requirements of this Management Plan.</li> <li>• Lead any investigations of incidents, non-compliances or complaints raised, and arrange for corrective actions to be implemented.</li> </ul>                    | All Project phases |

| Position                      | Responsibilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Project Phase      |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| ECMPL Environment Department  | <ul style="list-style-type: none"> <li>• Monitor compliance with this Management Plan and implement corrective actions where required.</li> <li>• Maintain records demonstrating implementation of this Management Plan</li> <li>• Report compliance, incidents and non-compliances as required.</li> <li>• Develop and deliver information and educational material on MNES species.</li> </ul>                                                                                                                            | All Project phases |
| All personnel and contractors | <ul style="list-style-type: none"> <li>• Comply with the requirements of this Management Plan and any associated environmental management plans and procedures.</li> <li>• Undertake works in a manner that avoids or minimises impacts to MNES.</li> <li>• Immediately report any environmental incidents, non-compliances or potential impacts to MNES.</li> <li>• Implement approved corrective actions where required.</li> <li>• Participate in Project environmental inductions and any relevant training.</li> </ul> | All Project phases |

## 2 MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

A combination of contemporary desktop assessments and field ecology surveys have been undertaken to understand the biodiversity values present in the Project Area. Results are detailed in the Contemporary Baseline Ecological Values Report (EMM 2026a).

As part of this assessment, a comprehensive likelihood of occurrence (LoO) assessment was undertaken to identify MNES and other conservation significant species with the potential to occur within the Project Area. The assessment incorporated desktop database searches, habitat suitability assessments, historical ecological investigations and the results of extensive contemporary field surveys undertaken between 2021 and 2026.

The LoO assessment was progressively refined as additional survey data became available, ensuring that species classifications reflected the best available information on habitat availability, survey effort and confirmed records.

Through this process, the MNES identified in Table 2.1 were confirmed as occurring within the Project Area. The known MNES are referred to as 'candidate MNES' for the purpose of this Management Plan.

**Table 2.1: MNES Known to Occur in the Project Area**

| Scientific Name                      | Common Name                 | Kingdom | Order   | EPBC Act Status       |
|--------------------------------------|-----------------------------|---------|---------|-----------------------|
| <b>Threatened Fauna Species</b>      |                             |         |         |                       |
| <i>Tiliqua scincoides intermedia</i> | Northern Blue-tongued Skink | Animal  | Reptile | Critically Endangered |
| <i>Varanus mertensi</i>              | Mertens' Water Monitor      | Animal  | Reptile | Endangered            |
| <i>Grantiella picta</i>              | Painted Honeyeater          | Animal  | Birds   | Vulnerable            |
| <b>Migratory Fauna Species</b>       |                             |         |         |                       |
| <i>Apus pacificus</i>                | Fork-tailed Swift           | Animal  | Birds   | Marine; Migratory     |

## 2.1 Candidate MNES Profiles

### 2.1.1 Northern Blue-tongued Skink (*Tiliqua scincoides intermedia*)

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Status</b>                  | Critically Endangered                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Distribution</b>            | The Northern Blue-tongue Skink occurs across northern Australia from Eighty Mile Beach in Western Australia, across the southern Kimberley and Top End of the Northern Territory, to approximately the Gregory Downs / Cloncurry area in western Queensland (DCCEEW 2023a). There is however a caveat in the Conservation Advice describing a sampling gap towards the eastern limit of the subspecies range. This sampling gap is likely to be due to a lack of targeted survey effort in the Cloncurry region. It is suggested the Cloncurry area is approximately the edge of its eastern range.                                                                                                                                                                |
| <b>Biology</b>                 | <p>Northern Blue-tongue Skink abundance can be high in areas free of Cane Toads. Targeted camera surveys in areas free of Cane Toads in the Central Kimberly detected a minimum of 0.3 – 6.6 mature Northern Blue-tongued Skinks per kilometre of linear habitat in sandy riparian, dry rocky escarpment, and small rocky gorge areas (Barton &amp; Smith 2018).</p> <p>Northern Blue-tongued Skinks are understood to mate in the dry season (August – September) and birth at the start of the wet season (December – January) (DCCEEW 2023a).</p> <p>The species eats a range of plants, insects and other invertebrates, as well as small vertebrates (DCCEEW 2023a).</p>                                                                                      |
| <b>Preferred Habitat</b>       | Observations of the subspecies occur from a variety of habitat types (Wilson & Swan 2021; DCCEEW 2023a), including dissected sandstone plateaus and gorges, limestone ranges, granite, basalt and dolerite hills, glacial shale undulations, sand plains, sandy waterways, swamps, cracking clay floodplains and coastal flats. Vegetation communities associated with the subspecies include riparian forest, vine scrub, monsoon rainforest, pandanus-lined gorges, melaleuca forest, eucalypt woodland and savanna, sparse and dense shrubland and spinifex and tussock grassland (DCCEEW 2023a).                                                                                                                                                               |
| <b>Habitat in Project Area</b> | Habitat within the Project Area is illustrated in Figure 2.1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Key threats</b>             | <p>The greatest threat to Northern Blue-tongued Skink persistence is Cane Toads (DCCEEW 2023a). Lethal ingestion of Cane Toad impacts many reptile species, particularly Northern Blue-tongued Skink as they share similar microhabitat preferences and therefore have increased exposure to Cane Toads.</p> <p>The greatest to least risks are identified in the Conservation Advice as follows;</p> <ul style="list-style-type: none"> <li>• Cane Toads</li> <li>• Feral Cats</li> <li>• frequent severe fires</li> <li>• Cattle and Feral Pigs</li> <li>• roads – prone to getting run-over in open areas near their shelters</li> <li>• mining</li> <li>• habitat loss through land clearing</li> <li>• drawdown of water</li> <li>• water quality.</li> </ul> |

### Dispersal

The Northern Blue-tonged Skink has a limited ability to disperse.

A study conducted by Price-Rees et al. (2012) determined that the average home range of Blue-tongued lizards (*Tiliqua* sp.) was 4 ha (with a range of 2-12 ha), however, only approximately a third of this home range is intensely used by individuals. Longer movements completed by Northern Blue-tongued Skinks for dispersal between core areas within their home range occur during midmorning and late afternoon when temperatures dropped, however generally, movements averaged less than 20 m (Price-Rees et al. 2014).

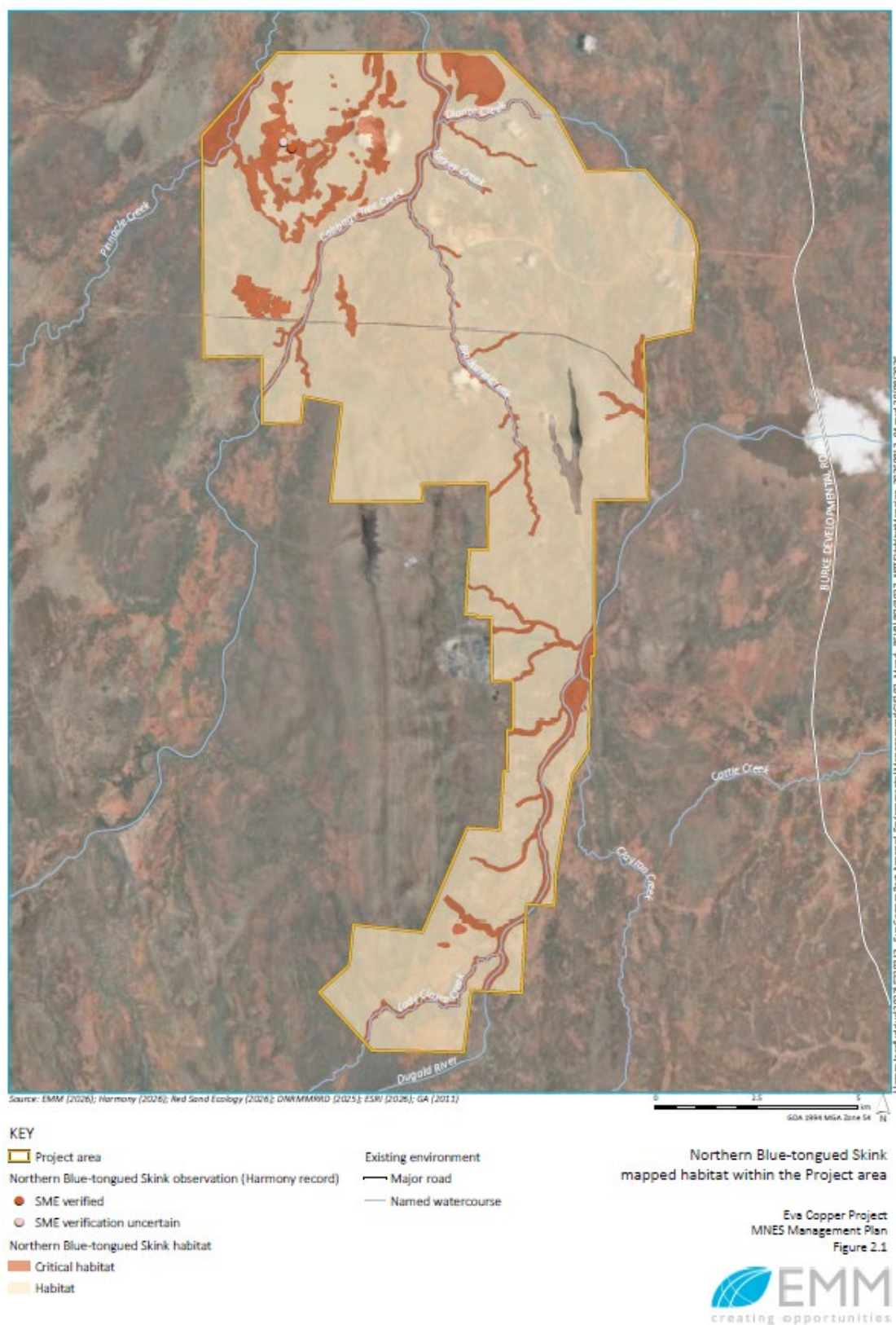


**Figure 2.1: Northern Blue-tongued Skink Mapped Habitat within the Project Area**

### 2.1.2 Mertens' Water Monitor (*Varanus mertensi*)

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Status</b>                  | Endangered                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Distribution</b>            | Mertens' Water Monitor is distributed patchily across tropical northern Australia, from west Kimberley in Western Australia to the wet tropics in for north Queensland. In Queensland, the southern extent is approximately bound by Mt Isa to Cairns in north Queensland (DCCEEW 2023b).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Biology</b>                 | <p>Mertens' Water Monitor is a semi-aquatic and arboreal species (Wilson &amp; Swan 2021).</p> <p>The species is diurnal, emerging from its overnight shelter in the morning, before foraging and basking for the day. The species retreats to shelter in the late afternoon. The species is active throughout the year, however, is most often encountered during the wet season, when it is more active (DCCEEW 2023b) and preparing to breed.</p> <p>The species generally mates in the wet season (Dec – Feb) and lays clutches of eggs during the late wet to early dry season (April – June). Hatchlings incubate for 9-10 months before emerging during the following wet season (DCCEEW 2023b).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Preferred Habitat</b>       | <p>Throughout its distribution, Mertens' Water Monitor is strongly associated with areas that contain waterbodies with the persistence of water a critical habitat consideration. Water is used for daily activities such as foraging and taking refuge, while basking generally occurs near water (Wilson &amp; Swan 2021; DCCEEW 2023b). Waterbodies utilised by Mertens' Water Monitor, as listed in <i>Conservation Advice for Varanus mertensi (Mertens' Water Monitor)</i> (DCCEEW 2023b) include:</p> <ul style="list-style-type: none"> <li>• perennial and semi-permanent pools in upper catchment areas, including springs, seeps, swamps, creeks and gorges</li> <li>• the margins of permanent streams, rivers and lakes in lower catchment areas</li> <li>• floodplain billabongs, lagoons, swamps and soaks</li> <li>• perennial waterholes in woodlands</li> <li>• man-made irrigation channels and the margins of dams.</li> </ul> <p>Mertens' Water Monitor are rarely found further than 5 to 10 m from the water's edge (DCCEEW 2023b) except when moving between areas (Mayes 2006) Structures occurring around waterbodies such as trees, dead timber, mud banks and rocks are utilised by the species for basking (DCCEEW 2023b).</p> |
| <b>Habitat in Project Area</b> | Habitat within the Project Area is illustrated in Figure 2.2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Key threats</b>             | <p>The Cane Toad is described as the greatest threat to the long-term persistence of Mertens' Water Monitor.</p> <p>Other threats to the species include predation and habitat destruction by Feral Pigs, trampling of habitat by Cattle, water drawdown from excessive surface and groundwater extraction, development, mining, frequent severe fire and direct harvesting.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Dispersal</b>               | Adult Mertens' Water Monitors move in areas of core activity and occasionally disperse between aquatic areas on a seasonal basis. The size of core activity areas and home ranges varies depending on individuals and the waterbodies they inhabit (DCCEEW 2023b).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

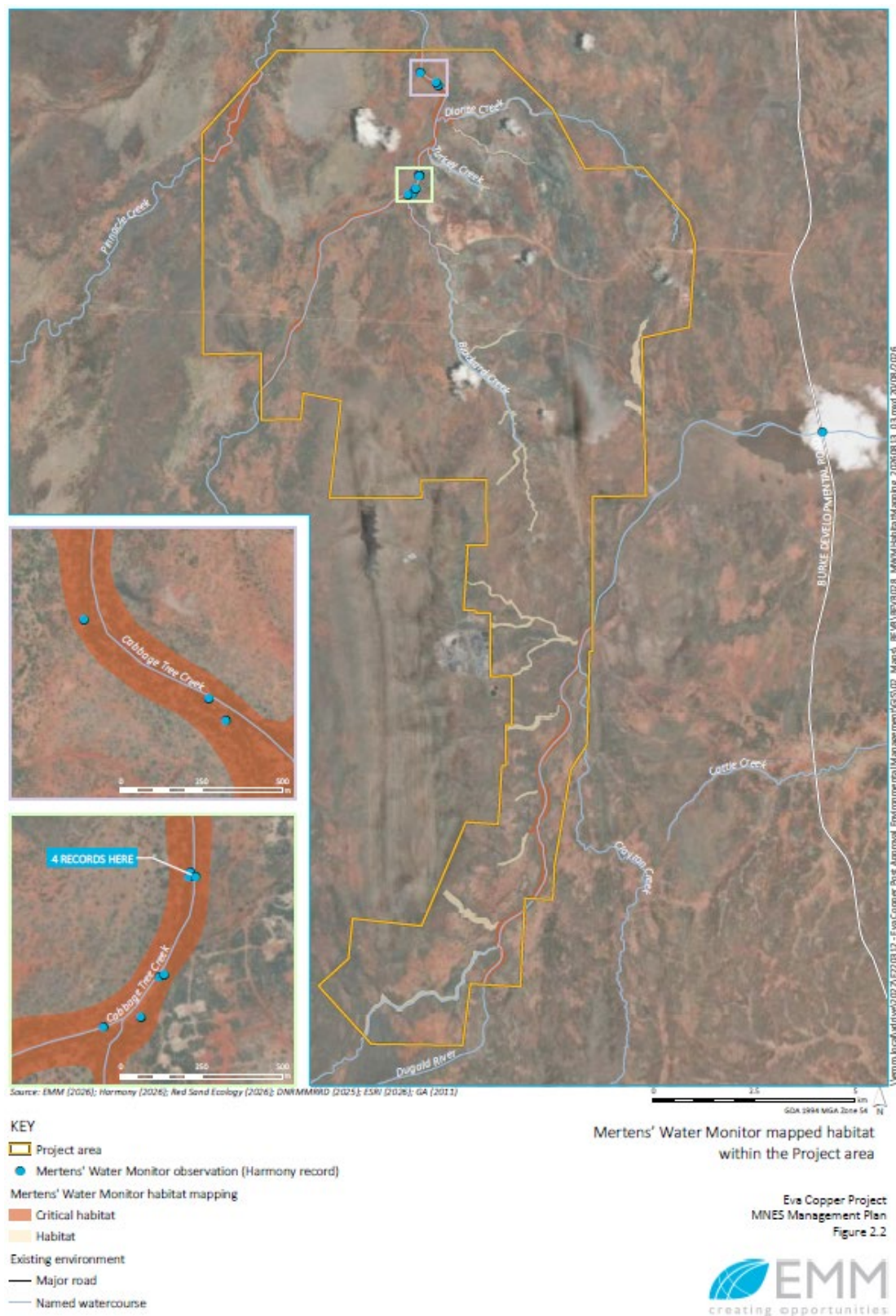


**Figure 2.2: Mertens' Water Monitor Mapped Habitat within the Project Area**

### 2.1.3 Painted Honeyeater (*Grantiella picta*)

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Status</b>                  | Vulnerable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Distribution</b>            | <p>The Painted Honeyeater is endemic to Australia and is sparsely distributed from south-eastern Australia to north-western Queensland and eastern Northern Territory (DAWE 2021).</p> <p>The Painted Honeyeater is nomadic and dispersive across its distribution. Its movements are primarily governed by the fruiting of mistletoe, which is aligned with its breeding season (DAWE 2021). Almost all records of breeding are south of 26°S, on inland slopes of the Great Dividing Range between the Grampians, Victoria and Roma, Queensland (Higgins et al, 2001), with breeding outside this range likely to be episodic and driven by localised mistletoe availability.</p>                                                                               |
| <b>Biology</b>                 | <p>Breeding for the Painted Honeyeater occurs from October to March, when mistletoe fruits are widely available. Birds leave nesting sites after around 5 months, when mistletoe berry numbers decline (DAWE 2021).</p> <p>The total number of individuals is estimated at &lt;10,000 (DAWE 2021).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Preferred Habitat</b>       | <p>The National Recovery Plan for the Painted Honeyeater indicates that the species has highly specialised habitat requirements:</p> <p><i>"Its diet mainly consists of mistletoe fruits, but also includes nectar (from flowering mistletoe, eucalypts and possibly banksias) and arthropods, especially in the non-breeding season ... The species inhabits mistletoes in eucalypt forests, woodlands, riparian woodlands of Black Box (Eucalyptus largiflorens) and River Red Gum (E. camaldulensis), box-ironbark yellow gum woodlands, acacia-dominated woodlands, paperbarks, casuarinas, callitris, and trees on farmland or gardens. The species prefers woodlands which contain a higher number of mature trees, as these host more mistletoes."</i></p> |
| <b>Habitat in Project Area</b> | Habitat within the Project Area is illustrated in Figure 2.3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Key threats</b>             | <p>A key threat to the Painted Honeyeater is habitat loss, particularly from clearing and loss of habitat recruitment due to grazing.</p> <p>Other threats to the Painted Honeyeater include resource competition with Noisy Miner birds (<i>Manoria melanocephala</i>), predation by invasive species, deliberate destruction of mistletoe in production forests, exacerbation of tree decline through pasture improvement activities, collision with vehicles, and predation by other birds (DAWE 2021).</p>                                                                                                                                                                                                                                                    |
| <b>Dispersal</b>               | This species is dispersive and nomadic. The species exhibits north-south movements depending primarily on fruiting mistletoe, and moves to semi-arid regions such as north-eastern South Australia, central and western Queensland and central Northern Territory after breeding (DAWE 2021).                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

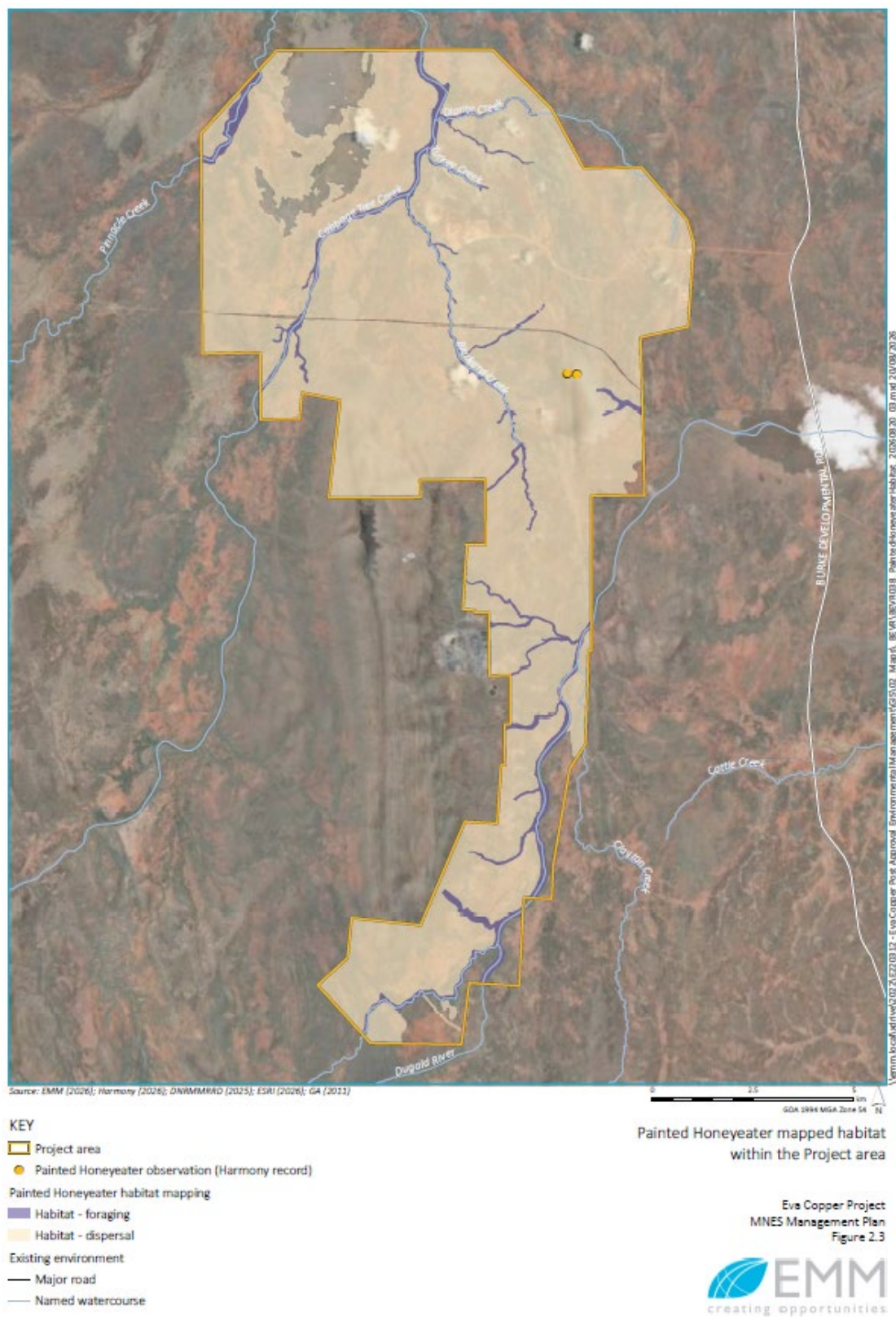


**Figure 2.3: Painted Honeyeater Mapped Habitat within the Project Area**

#### 2.1.4 Fork-tailed Swift (*Apus pacificus*)

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EPBC Status</b>             | Marine, migratory                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Distribution</b>            | The Fork-tailed Swift ( <i>Apus pacificus</i> ) is a non-breeding visitor to all states and territories of Australia (Higgins 1999).                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Biology</b>                 | <p>The Fork-tailed Swift breeds in Siberia and annually migrates south from August – September. The Fork-tailed Swift usually arrives in Australia around October and is highly mobile through Australia, following low pressure systems across the continent in search of food. The Fork-tailed Swift typically departs Australia by May and returns to the northern hemisphere (Higgins 1999).</p> <p>There are no measures of abundance of this species in Australia, however, populations at a global population level are believed to be stable throughout most of its range (Del Hoyo et al, 1996)</p> |
| <b>Preferred Habitat</b>       | In Australia, the species is almost exclusively aerial, flying from less than 1 m to at least 300 m above ground and probably much higher. The species is found across a range of habitats, from inland open plains to wooded areas (DCCEEW 2026).                                                                                                                                                                                                                                                                                                                                                           |
| <b>Habitat in project area</b> | In Australia, this species is almost exclusively aerial. Suitable habitat for this species was not mapped as the entire Project area provides suitable aerial foraging habitat.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Key threats</b>             | According to the Species Profile and Threats database for the Fork-tailed Swift, there are no significant threats to this species. Potential threats include habitat destruction and predation by feral animals (DCCEEW 2026).                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Dispersal</b>               | This species is highly mobile whilst in Australia (DCCEEW 2026).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 2.2 Relevant published documentation

Table 2.2 lists the conservation advice, guidelines and management plans relevant to each of the MNES fauna species covered by this Management Plan. These documents have been reviewed in preparing this Management Plan.

**Table 2.2: Relevant Plans and Guidelines for Significant MNES values**

| MNES Species                                                         | Relevant Conservation Advice and Management Plans                                                                                                                                                                                                                                                                                                                  | Key Threats                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Northern Blue-tongued Skink ( <i>Tiliqua scincoides intermedia</i> ) | <ul style="list-style-type: none"> <li>Conservation Advice for <i>Tiliqua scincoides intermedia</i> (Northern Blue-tongued Skink) (DCCEEW 2023a)</li> <li>Threat abatement plan for predation by Feral Cats (DCCEEW 2024a)</li> <li>Threat abatement plan for the biological effects, including lethal toxic ingestion, caused by Cane Toads (DoE 2011)</li> </ul> | <ul style="list-style-type: none"> <li>Exotic invasive species: Cane Toad, Cattle, Asian water buffalo, Feral Pig</li> <li>Fire regimes that cause declines in biodiversity: Frequent severe fire, post-fire predation by Feral Cat (<i>Felis catus</i>)</li> <li>Habitat loss, disturbance and modification from mining</li> <li>Water drawdown and water inundation</li> <li>Human intrusion: Illegal collection (for international pet market), traditional hunting</li> </ul> |
| Mertens' Water Monitor ( <i>Varanus mertensi</i> )                   | <ul style="list-style-type: none"> <li>Conservation Advice for <i>Varanus mertensi</i> (Martens' water monitor) (DCCEEW 2023b)</li> <li>Threat abatement plan for the biological effects, including lethal toxic ingestion, caused by Cane Toads (DoE 2011)</li> </ul>                                                                                             | <ul style="list-style-type: none"> <li>Exotic invasive species: Cane Toad, Cattle, Asian Water Buffalo, Feral Pig</li> <li>Water drawdown</li> <li>Habitat loss, disturbance and modification, from development and mining</li> <li>Frequent severe fire</li> <li>Direct harvesting</li> </ul>                                                                                                                                                                                    |
| Painted Honeyeater ( <i>Grantiella picta</i> )                       | <ul style="list-style-type: none"> <li>Conservation advice for <i>Grantiella picta</i> (Painted Honeyeater) (DoE 2015)</li> <li>National Recovery Plan for the Painted Honeyeater (DAWE 2021)</li> </ul>                                                                                                                                                           | <ul style="list-style-type: none"> <li>Habitat loss</li> <li>Climate variability and change</li> <li>Habitat degradation</li> <li>Competition</li> </ul>                                                                                                                                                                                                                                                                                                                          |
| Fork-tailed Swift ( <i>Apus pacificus</i> )                          | <ul style="list-style-type: none"> <li>There is no approved Conservation Advice for this species</li> </ul>                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### 3 POTENTIAL IMPACT TO MNES

The Project has the potential to result in direct and indirect impacts to MNES. Based on those matters of MNES that are known or have moderate or greater potential to occur, impact assessments in accordance with *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* have been completed to determine if the Project is likely to cause a significant impact on any MNES. All impact assessments are included in the Eva Copper Mine Project MNES Impact Assessment (EMM 2026b and EMM 2026c).

#### 3.1 Direct impacts

Direct impacts are the immediate consequences of activities undertaken as part of the Action. They include impacts occurring within the Disturbance Footprint or directly resulting from construction and operational activities, such as vegetation clearing, removal of waterways, fauna injury or mortality and increased bushfire risk.

Most direct impacts associated with the Action will occur once during initial vegetation clearing and the construction and development of the relevant infrastructure. The subsequent operation and maintenance of established activities will generally be undertaken within disturbance areas and are not expected to require repeated vegetation clearing, waterway removal or other expansion of the Disturbance Footprint.

Some direct-impact risks, particularly vehicle strike and accidental fire ignition, will remain throughout operations and may occur more than once

#### 3.2 Indirect impacts

Indirect impacts are impacts that arise as a consequence of the Action but may occur beyond the immediate location or timing of the activity that causes them. Unlike most direct impacts, indirect impacts may occur intermittently or continuously throughout construction, operations and maintenance and may extend beyond the Disturbance Footprint. Their occurrence, timing and magnitude are generally less predictable because they are influenced by factors such as rainfall, flood events, groundwater responses, fauna behaviour, vegetation condition and the effectiveness of management measures. Some indirect impacts may also interact or accumulate over time, including habitat fragmentation, altered fire regimes, pest establishment and changes to water-dependent ecosystems.

Table 3.1 summarises the potential impacts to candidate MNES addressed by this Management Plan

**Table 3.1: Summary of Potential Impacts to MNES for Risk Management Assessment**

| Impacts                              | Potential Impacts to MNES                                                                                                                                                                                                                                                                                                                | Impacted MNES Species                                                                                                                                                | Staging                                                                                                                       |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Direct Impacts</b>                |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                      |                                                                                                                               |
| Vegetation clearing and habitat loss | <ul style="list-style-type: none"> <li>Removal of vegetation that provides foraging and/or breeding habitat for a threatened species</li> </ul>                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Fork-tailed Swift</li> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Construction</li> </ul>                                                                |
| Fauna and flora mortality and injury | <ul style="list-style-type: none"> <li>Direct mortality or injury resulting from vegetation clearing, earthworks, vehicles and construction activities</li> </ul>                                                                                                                                                                        | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul>                            | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> <li>Rehabilitation and decommissioning</li> </ul> |
| <b>Indirect Impacts</b>              |                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                      |                                                                                                                               |
| Edge effects and fragmentation       | <ul style="list-style-type: none"> <li>Vegetation clearing has the potential to fragment retained habitat, reduce fauna movement and connectivity, and increase edge effects such as weed invasion, feral animal activity and bushfire risk, which may indirectly affect the habitat quality and ecological function of MNES.</li> </ul> | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul>                            | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>                                             |
| Mine water releases                  | <ul style="list-style-type: none"> <li>The release of mine-affected water has the potential to indirectly impact MNES through changes to downstream water quality, hydrology and aquatic ecological function within receiving watercourses and associated habitats.</li> </ul>                                                           | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> </ul>                                                        | <ul style="list-style-type: none"> <li>Operation</li> </ul>                                                                   |

| Impacts                                      | Potential Impacts to MNES                                                                                                                                                                                                                                                                                                                             | Impacted MNES Species                                                                                                                     | Staging                                                                                                                       |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Erosion, sedimentation, changes to hydrology | <ul style="list-style-type: none"> <li>Construction activities have the potential to indirectly impact MNES through erosion, sedimentation and accidental pollutant releases, which may degrade water quality, alter surface water flows and reduce the quality of aquatic and riparian habitats.</li> </ul>                                          | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> </ul>                             | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> <li>Rehabilitation and decommissioning</li> </ul> |
| Groundwater drawdown                         | <ul style="list-style-type: none"> <li>Project-related groundwater drawdown has the potential to indirectly impact MNES by affecting groundwater dependent ecosystems, resulting in changes to vegetation condition, community composition and the quality of groundwater-dependent habitat.</li> </ul>                                               | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Operation</li> </ul>                                                                   |
| Noise and lighting                           | <ul style="list-style-type: none"> <li>Construction and operational noise and artificial lighting have the potential to indirectly impact MNES by causing disturbance, altering behaviour, disrupting movement, breeding and foraging activities, and reducing the suitability of adjacent habitat for noise- and light-sensitive species.</li> </ul> | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>                                             |
| Dust                                         | <ul style="list-style-type: none"> <li>Dust generated during construction activities has the potential to indirectly impact MNES by reducing vegetation health and habitat quality, affecting fauna through respiratory exposure, and degrading soil and water quality in adjacent habitats.</li> </ul>                                               | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> <li>Rehabilitation and decommissioning</li> </ul> |
| Pest animal species                          | <ul style="list-style-type: none"> <li>Project activities have the potential to indirectly impact MNES by facilitating the introduction, establishment or spread of pest fauna, resulting in increased predation, competition and habitat degradation</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> <li>Rehabilitation and decommissioning</li> </ul> |

| Impacts            | Potential Impacts to MNES                                                                                                                                                                                                                                                                                                                                                                                                 | Impacted MNES Species                                                                                                                     | Staging                                                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Pest flora species | <ul style="list-style-type: none"> <li>Project activities have the potential to indirectly impact MNES by facilitating the introduction and spread of pest flora, resulting in habitat degradation, reduced native vegetation condition and diminished habitat quality within and adjacent to the Project area.</li> </ul>                                                                                                | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> <li>Rehabilitation and decommissioning</li> </ul> |
| Bushfire risk      | <ul style="list-style-type: none"> <li>Project activities have the potential to increase the risk of unplanned bushfire, which may alter the composition, structure and function of vegetation communities, resulting in the loss or degradation of habitat and foraging resources, direct mortality of MNES, and reduced long-term habitat quality through altered fire regimes and delayed habitat recovery.</li> </ul> | <ul style="list-style-type: none"> <li>Mertens' Water Monitor</li> <li>Northern Blue-tongued Skink</li> <li>Painted Honeyeater</li> </ul> | <ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>                                             |

## 4 MANAGEMENT FRAMEWORK

### 4.1 Hierarchy of controls

Management measures developed for the Project consider concepts outlined within the mitigation hierarchy (Section 4.1.1) and SMART Principles (Section 4.1.2). They are informed by the consideration of risk for each of the direct and indirect impact pathways identified.

#### 4.1.1 Mitigation hierarchy

The mitigation hierarchy is a tool used to limit impact of an action, on the environment. The hierarchy of controls to be implemented in order of importance consist of:

1. **Avoid:** Avoiding direct and indirect adverse impacts where possible through Project design;
2. **Mitigate:** Mitigating direct and indirect adverse impacts where impacts cannot be avoided through actions to reduce likelihood or severity of impacts occurring such as modifying design (e.g. designing waterway crossings to allow fauna movement, employing specialist clearing and construction methods, reducing vehicle speed limits);
3. **Remediate and rehabilitate:** Actively and progressively remediate and rehabilitate impacted areas to promote and maintain long-term recovery; and
4. **Offset:** Deliver environmental offsets for significant, residual impacts to MNES which are addressed in a separate Offset Strategy and offset management plan in accordance with the EPBC Act approval conditions.

The Project reflects an integrated approach to balancing technical feasibility, operational efficiency and environmental protection. Key components of the Project, including pit geometry, infrastructure siting, TSF configuration, MAW management and ancillary infrastructure, were developed having regard to geological constraints, engineering requirements and environmental factors relevant to the Project area.

The Project as proposed has been designed to enhance resource recovery, improve operational efficiency, and minimise environmental impacts through careful planning and the strategic placement of infrastructure. The proposed Project therefore represents the preferred environmental outcome among the alternatives considered, incorporating design measures that avoid or minimise potential impacts to MNES wherever practicable.

#### 4.1.2 SMART principle

All management measures have been developed to be consistent with the S.M.A.R.T principle, to ensure that measures are:

- **Specific** – prescriptive, with no uncertainty or ambiguity around their purpose or implementation.
- **Measurable** – the status (i.e. success or failure) and outcomes/results can be measured.
- **Achievable** – through the chosen method of implementation, by the responsible personnel and within the specified timeframe.
- **Relevant** – to the action/impact being controlled and to the protected matter.
- **Time bound** – Measures were given specific and achievable timeframes for implementation in relation to specific development activities or stages.

### 4.1.3 Ground Disturbance Permit Procedure

The Ground Disturbance Permit (GDP) Procedure is a key component of the Project's overarching environmental management framework, providing the primary mechanism for ensuring environmental, statutory and operational requirements are identified, assessed and implemented prior to the commencement of any ground disturbance activities. All vegetation clearing and ground disturbance activities undertaken as part of the Project will be managed through ECMPL's GDP provides a formal approval mechanism to verify that environmental constraints, statutory requirements, pre-disturbance surveys, permit conditions and required management measures have been identified and implemented before any disturbance commences.

The GDP Procedure ensures disturbance activities are appropriately planned, communicated and authorised, and forms a key environmental control supporting implementation of this Management Plan.

## 4.2 Environmental outcomes and performance indicators

The environmental outcomes and associated performance indicators for the MNES addressed by this Management Plan are presented in Table 4.1. The environmental outcomes define the intended environmental results to be achieved, while the performance indicators provide the overarching basis for assessing achievement of those outcomes.

The performance criteria and associated mitigation and management measures presented in Section 4.3 support achievement of these environmental outcomes by addressing the key direct and indirect impact pathways identified in Section 3. Achievement of the environmental outcomes and performance indicators will be assessed with reference to the performance criteria and monitoring framework described in Section 4.4. Where required, adaptive management and corrective actions will be implemented in accordance with Section 4.5 and Section 4.6.

**Table 4.1 Environmental outcomes and performance indicators for MNES**

| MNES                                                   | Environmental outcome                                                                                                                                                            | Performance indicator                                                                                                                                                                                                |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Northern Blue-tongued Skink habitat</b>             | No disturbance to mapped Northern Blue-tongued Skink habitat outside the Disturbance Footprint and for any other activities lawfully undertaken outside the scope of the Action. | All disturbance associated with the Action is contained within the approved Disturbance Footprint and undertaken in accordance with applicable Ground Disturbance Permit (GDP) and fauna pre-clearance requirements. |
| <b>Mertens' Water Monitor aquatic/riparian habitat</b> | Maintain quality and function of mapped aquatic/riparian habitat outside the Disturbance Footprint                                                                               | No uncontrolled release of Mine Affected Water or sediment-laden runoff causing exceedance of adopted water quality trigger values                                                                                   |
| <b>Painted Honeyeater habitat</b>                      | Retain mapped habitat outside the Disturbance Footprint                                                                                                                          | All disturbance associated with the Action is contained within the approved Disturbance Footprint and undertaken in accordance with applicable Ground Disturbance Permit (GDP) and fauna pre-clearance requirements. |

|                          |                                                                                        |                                                                                   |
|--------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                          |                                                                                        | Weed/pest/fire controls implemented in retained habitat                           |
| <b>Fork-tailed Swift</b> | Minimise indirect impacts to aerial foraging habitat and general environmental quality | Dust, fire and habitat disturbance controls implemented across all project phases |

### 4.3 MNES mitigation and management measures

Table 4.4 identifies the performance criteria and associated mitigation and management measures to be implemented to support achievement of the environmental outcomes and performance indicators identified in Table 4.1, and to avoid, minimise and mitigate potential direct and indirect impacts on candidate MNES.

The measures are supported by the Project's broader environmental management framework and will be implemented in conjunction with the plans and monitoring programs identified in Section 1.3. Performance against these measures will be monitored throughout the Project to verify their effectiveness and identify where adaptive management, or corrective actions may be required.

The residual risk to MNES resulting from the Project, after the implementation of management and mitigation measures has been assessed and is identified in Table 4.4. Risks have been assessed using the template outlined in the *Environmental management plan guidelines* (DCCEEW 2024b) as presented in Table 4.2 and Table 4.3

**Table 4.2 Risk Matrix used within the Risk Management Assessment**

| Likelihood               | Consequences |              |          |           |              |
|--------------------------|--------------|--------------|----------|-----------|--------------|
|                          | 1 - Minor    | 2 - Moderate | 3 - High | 4 - Major | 5 - Critical |
| <b>5 - Highly Likely</b> | Medium       | High         | High     | Severe    | Severe       |
| <b>4 - Likely</b>        | Low          | Medium       | Medium   | High      | Severe       |
| <b>3 - Possible</b>      | Low          | Medium       | Medium   | High      | Severe       |
| <b>2 - Unlikely</b>      | Low          | Low          | Medium   | High      | High         |
| <b>1 - Rare</b>          | Low          | Low          | Medium   | Medium    | High         |

**Table 4.3: Final Risk Rating based on the Likelihood (L) and Consequence (C)**

| <b>Qualitative measure of likelihood (L)</b>   | <b>How likely is it that this event/issue will occur after control strategies have been put in place?</b> |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| 1. Rare                                        | May occur in exceptional circumstances                                                                    |
| 2. Unlikely                                    | Could occur but considered unlikely or doubtful                                                           |
| 3. Possible                                    | Might occur during the life of the Project                                                                |
| 4. Likely                                      | Will probably occur during the life of the Project                                                        |
| 5. Highly Likely                               | Is expected to occur in most circumstances                                                                |
| <b>Qualitative measure of consequences (C)</b> | <b>What will be the consequence / result if this issue does occur rating?</b>                             |
| 1. Minor                                       | Minor incident of environmental damage that can be reversed                                               |
| 2. Moderate                                    | Isolated but substantial instances of environmental damage that could be reversed with intensive efforts  |
| 3. High                                        | Substantial instances of environmental damage that could be reversed with intensive efforts               |
| 4. Major                                       | Major loss of environmental amenity and real danger of continuing                                         |
| 5. Critical                                    | Severe widespread loss of environmental amenity and irrecoverable environmental damage                    |

**Table 4.4: MNES Mitigation and Management Measures and Residual Risk Level**

| Performance criteria                                                 | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                 | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Timing                                  | Residual Likelihood | Residual Consequence | Residual Risk Level |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------|----------------------|---------------------|
| Impacts on MNES are avoided and minimised during vegetation clearing | <ul style="list-style-type: none"> <li>Direct mortality or injury resulting from vegetation clearing, earthworks, vehicles and construction activities</li> <li>Removal of vegetation that provides foraging and/or breeding habitat for a threatened species</li> </ul> | <ul style="list-style-type: none"> <li>A qualified fauna spotter/catcher will be engaged to work ahead of site clearing works to ensure the protection of fauna species including candidate MNES.</li> <li>Clearing limits will be clearly demarcated on site to ensure personnel and vehicles stay within the approved Project footprints.</li> <li>Pre-clearance walkthroughs of clearing areas will be undertaken with staff, contractors and any associated persons prior to clearing works being undertaken.</li> <li>Access will be limited to approved access routes and tracks.</li> <li>Ground disturbance activities are to be assessed and approved via ECMPL's Ground Disturbance Permit (GDP) Procedure. Copies of the approved GDP are to be provided to all relevant staff, contractors or agents carrying out these activities.</li> <li>Sequential clearing of woody vegetation will occur to minimise impacts on native fauna.</li> </ul> | Prior to and during vegetation clearing | L3                  | C2                   | Medium              |

| Performance criteria          | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                                                                                 | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timing  | Residual Likelihood | Residual Consequence | Residual Risk Level |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|----------------------|---------------------|
| Maintain habitat connectivity | <ul style="list-style-type: none"> <li>Vegetation clearing has the potential to fragment retained habitat, reduce fauna movement and connectivity, and increase edge effects such as weed invasion, feral animal activity and bushfire risk, which may indirectly affect the habitat quality and ecological function of MNES.</li> </ul> | <ul style="list-style-type: none"> <li>Clearing limits will be clearly demarcated on site to ensure personnel and vehicles stay within the approved footprints.</li> <li>Access will be limited to approved access routes and tracks.</li> <li>Ground disturbance activities are to be assessed and approved via ECMPL's GDP procedure. Copies of the approved GDP are to be provided to all relevant staff, contractors or agents carrying out these activities.</li> <li>Large areas of habitat will be retained across the Project area including riparian corridors. This will ensure that the fauna species occurring in the Project area still have areas they can utilise and move through, including to habitats outside the Project Area.</li> <li>Construction of all creek crossings should commence and where possible be constructed during the dry season, to reduce interactions and impediments to MNES dispersal in riparian habitat.</li> <li>Implement the Weed and Pest Management Plan (Annexure A) to avoid further impacting the quality of retained areas of habitat along riparian corridors and in areas of contiguous remnant vegetation.</li> </ul> | Ongoing | L3                  | C2                   | Medium              |

| Performance criteria                                                                   | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                                                                   | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timing                                            | Residual Likelihood | Residual Consequence | Residual Risk Level |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------|----------------------|---------------------|
| Maintain and expand cattle exclusion fencing                                           | <ul style="list-style-type: none"> <li>Removal of vegetation that provides foraging and/or breeding habitat for a threatened species</li> </ul>                                                                                                                                                                            | <ul style="list-style-type: none"> <li>Maintain existing cattle exclusion fencing (refer Figure 4.1) in a functional condition through routine inspections and timely repairs.</li> <li>Extend cattle exclusion fencing in line with staged Project development to protect additional areas of sensitive habitat, riparian vegetation and known threatened species habitat where required and in consultation with the pastoral leaseholders.</li> </ul>                                                                                                                                                                                                                                                                                            | Ongoing / in line with staged Project development | L2                  | C2                   | Low                 |
| Prevent the introduction and/or spread of weeds and/or disease within the Project area | <ul style="list-style-type: none"> <li>Project activities have the potential to indirectly impact MNES by facilitating the introduction and spread of pest flora, resulting in habitat degradation, reduced native vegetation condition and diminished habitat quality within and adjacent to the Project area.</li> </ul> | <ul style="list-style-type: none"> <li>Implement the Weed and Pest Management Plan (Annexure A)</li> <li>A Biosecurity Management Procedure, which also considers Biosecurity Management Plans held by landowners grazing the Mining Leases under the <i>Biosecurity Act 2014</i>, will be implemented.</li> <li>All vehicles, mobile plant and equipment entering the Project area will comply with the Biosecurity Management Procedure, including completion of Weed Hygiene Declarations where required.</li> <li>Weed hygiene protocols will be implemented such as a dedicated vehicle and machinery cleaning bay. This will not be placed near a watercourse, and runoff will be contained and the area treated with herbicide to</li> </ul> | Ongoing                                           | L2                  | C2                   | Low                 |

| Performance criteria | Associated Impacts (Direct and Indirect) | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timing | Residual Likelihood | Residual Consequence | Residual Risk Level |
|----------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------|----------------------|---------------------|
|                      |                                          | <p>control weeds that are washed off plant and equipment.</p> <ul style="list-style-type: none"> <li>Requirements and expectations regarding vehicle and fleet hygiene will be communicated to staff and contractors.</li> <li>Hygiene checks will focus on ensuring no pest flora material, seed, or pest flora or fauna contaminated soil or mud enters the Project Area or is transferred from known infestation areas via vehicles, machinery or equipment. Personal protective equipment, equipment and footwear will be cleaned prior to entering the Project Area and before leaving known contaminated areas. Pest flora species will be identified through the Baseline Pest Flora and Fauna Report and during pre-clearing surveys, with particular attention given to identifying large infestations within proposed disturbance areas. Any materials brought into site (such as gravel) will be certified as weed and disease free.</li> <li>Access into retained areas of habitat during construction will be limited and monitoring of weeds in these areas in place.</li> </ul> |        |                     |                      |                     |

| Performance criteria                     | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                         | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timing  | Residual Likelihood | Residual Consequence | Residual Risk Level |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|----------------------|---------------------|
| Control the spread of pest fauna species | <ul style="list-style-type: none"> <li>Project activities have the potential to indirectly impact MNES by facilitating the introduction, establishment or spread of pest fauna, resulting in increased predation, competition and habitat degradation</li> </ul> | <ul style="list-style-type: none"> <li>Implement the Weed and Pest Management Plan (Annexure A)</li> <li>Implement the Cane Toad Management and Monitoring Plan (Annexure B)</li> <li>Onsite waste disposal facilities will be established to centrally manage waste (especially food waste) and discourage presence of pest fauna.</li> </ul>                                                                                                                                                                                                                                                  | Ongoing | L3                  | C2                   | Medium              |
| Minimise vehicle strike on MNES          | <ul style="list-style-type: none"> <li>Direct mortality or injury resulting from vegetation clearing, earthworks, vehicles and construction activities</li> </ul>                                                                                                | <ul style="list-style-type: none"> <li>A maximum speed limit of 40 km/hr will be enforced within the Project area, with lower speed limits applied in high-traffic areas, including the Accommodation Village and mining areas, as indicated by signage. Further reduced speed limits may also be applied where roads intersect high-value retained habitat or areas of higher fauna activity</li> <li>Install wildlife signage</li> <li>Ensure all site personnel and contractors undergo inductions and training to ensure they are aware of fauna risks and management protocols.</li> </ul> | Ongoing | L3                  | C2                   | Medium              |

| Performance criteria                  | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                                                     | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                  | Timing  | Residual Likelihood | Residual Consequence | Residual Risk Level |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|----------------------|---------------------|
| Prevent soil runoff into watercourses | <ul style="list-style-type: none"> <li>Construction activities have the potential to indirectly impact MNES through erosion, sedimentation and accidental pollutant releases, which may degrade water quality, alter surface water flows and reduce the quality of aquatic and riparian habitats.</li> </ul> | <ul style="list-style-type: none"> <li>Detailed erosion and sediment control plans (ESCPs) will be developed as part of the construction management. The ESCP will detail specific erosion and sedimentation controls to be implemented for the various construction areas in accordance with the Best Practice Erosion and Sediment Control, published by the Australasian IECA (2008).</li> </ul> | Ongoing | L2                  | C2                   | Low                 |

| Performance criteria                                            | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Mitigation and management measures                                                                                                                                                                                                                                                                                                                     | Timing    | Residual Likelihood | Residual Consequence | Residual Risk Level |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------|----------------------|---------------------|
| Impacts to water quality from controlled releases are minimised | <ul style="list-style-type: none"> <li>Construction activities have the potential to indirectly impact MNES through erosion, sedimentation and accidental pollutant releases, which may degrade water quality, alter surface water flows and reduce the quality of aquatic and riparian habitats.</li> <li>The release of mine-affected water has the potential to indirectly impact MNES through changes to downstream water quality, hydrology and aquatic ecological function within receiving watercourses and associated habitats.</li> </ul> | <ul style="list-style-type: none"> <li>Controlled discharges will be undertaken only from authorised release points and only when defined flow and water quality conditions are satisfied.</li> <li>A Receiving Environment Monitoring Program will be implemented to monitor impacts to the receiving waterways as a result of the Project</li> </ul> | Operation | L2                  | C3                   | Medium              |

| Performance criteria                                | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                                                                                              | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timing  | Residual Likelihood | Residual Consequence | Residual Risk Level |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|----------------------|---------------------|
| Reduce light spill into adjacent habitat            | <ul style="list-style-type: none"> <li>Construction and operational noise and artificial lighting have the potential to indirectly impact MNES by causing disturbance, altering behaviour, disrupting movement, breeding and foraging activities, and reducing the suitability of adjacent habitat for noise- and light-sensitive species.</li> </ul> | <ul style="list-style-type: none"> <li>Night lighting will be limited to that required to support safe and secure 24-hour operations, including lighting at critical operational locations such as the Processing Plant. Where practicable, lighting will be designed and positioned to minimise light spill and directed away from mapped habitat, except where required for operational safety and security.</li> <li>Directional lighting will be away from environmentally sensitive areas where safety is not impacted.</li> </ul>                                                                                                                                            | Ongoing | L3                  | C2                   | Medium              |
| Edge effects from air quality impacts are minimised | <ul style="list-style-type: none"> <li>Dust generated during construction activities has the potential to indirectly impact MNES by reducing vegetation health and habitat quality, affecting fauna through respiratory exposure, and degrading soil and water quality in adjacent habitats.</li> </ul>                                               | <ul style="list-style-type: none"> <li>Areas which have potential to generate airborne dust will be wetted down regularly.</li> <li>Low speed limits will be implemented on site to minimise dust generation.</li> <li>Areas stripped of topsoil not required for operation will be rehabilitated as soon as practicable.</li> <li>Machinery and vehicle tyres will be regularly cleaned to reduce wheel entrained dust emissions.</li> <li>Implement additional dust suppression (water spraying on nearby sensitive vegetation) if visible dust is observed.</li> <li>Regular monitoring will be undertaken to assess the effectiveness of dust suppression measures.</li> </ul> | Ongoing | L2                  | C2                   | Low                 |

| Performance criteria                          | Associated Impacts (Direct and Indirect)                                                                                                                                                                                                                                                                                                                                                                                  | Mitigation and management measures                                                                                                                                                                                                                                                                                                                                                                                                 | Timing  | Residual Likelihood | Residual Consequence | Residual Risk Level |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|----------------------|---------------------|
| Edge effects from noise impacts are minimised | <ul style="list-style-type: none"> <li>Construction and operational noise and artificial lighting have the potential to indirectly impact MNES by causing disturbance, altering behaviour, disrupting movement, breeding and foraging activities, and reducing the suitability of adjacent habitat for noise- and light-sensitive species.</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>All equipment used onsite will be properly maintained in accordance with manufacturer's specifications.</li> <li>Noise control techniques will be implemented in accordance with standard industry noise suppression techniques.</li> <li>Plant and equipment will be operated in the quietest and most efficient manner, including not operating plant when it is not required.</li> </ul> | Ongoing | L3                  | C2                   | Medium              |
| Reduced risk of uncontrolled fire events      | <ul style="list-style-type: none"> <li>Project activities have the potential to increase the risk of unplanned bushfire, which may alter the composition, structure and function of vegetation communities, resulting in the loss or degradation of habitat and foraging resources, direct mortality of MNES, and reduced long-term habitat quality through altered fire regimes and delayed habitat recovery.</li> </ul> | <ul style="list-style-type: none"> <li>Implement a Bushfire Management Plan</li> <li>Fire and emergency response capabilities will be available to limit the spread and severity of any fire events in the Project area</li> </ul>                                                                                                                                                                                                 | Ongoing | L3                  | C2                   | Medium              |

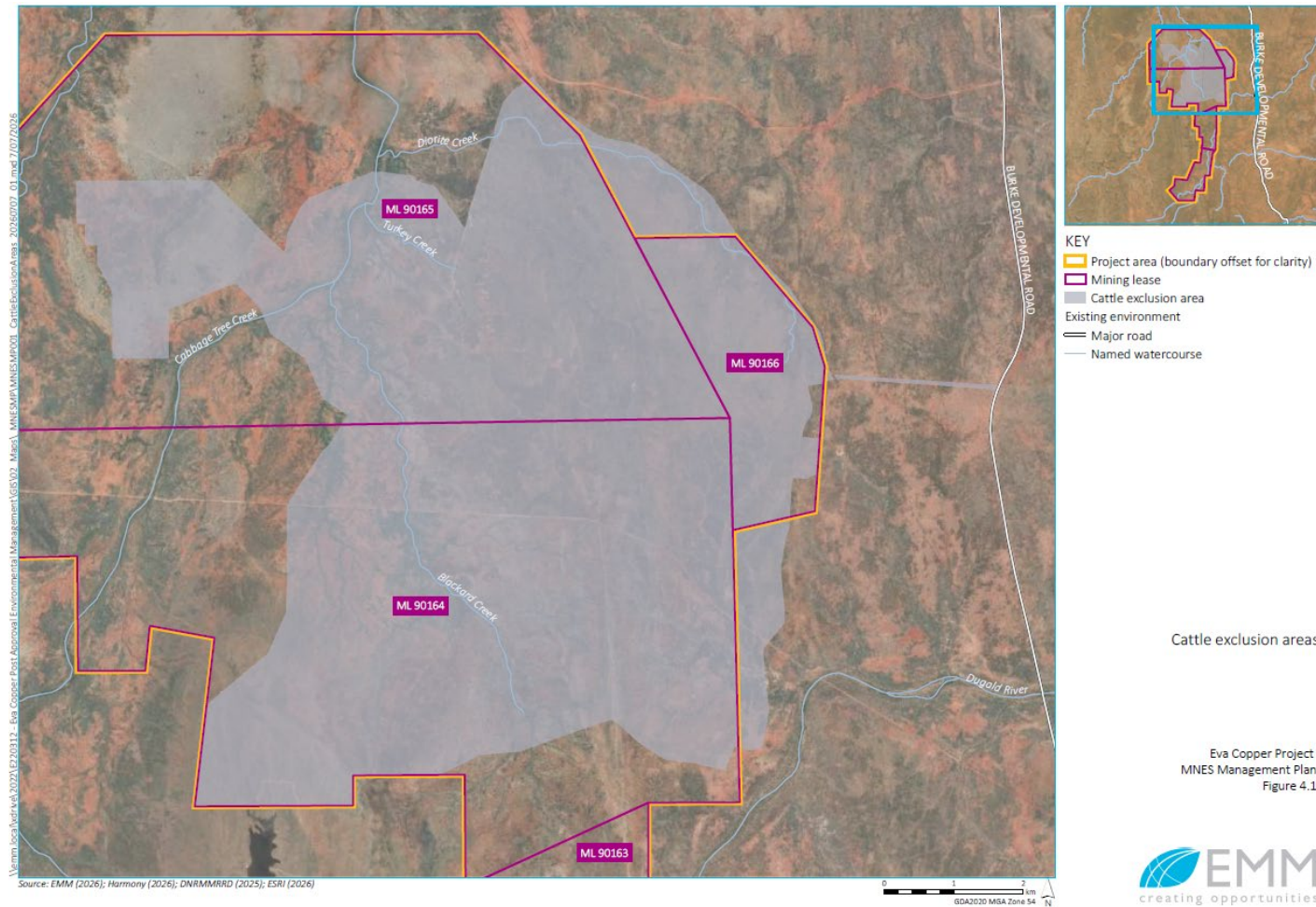


**Figure 4.1: Cattle Exclusion Areas**

## **4.4 Monitoring**

### **4.4.1 Monitoring objectives**

Monitoring will be undertaken throughout the life of the Project to:

- Verify that the mitigation and management measures identified in this Management Plan have been implemented;
- Assess whether the performance criteria in Table 4.4 are being achieved;
- Identify direct or indirect impacts on MNES or their habitat at an early stage;
- Assess changes in the condition, extent and connectivity of retained MNES habitat;
- Evaluate the effectiveness of management measures and inform adaptive management;
- Identify non-compliances, incidents and emerging risks requiring corrective action; and
- Maintain a suitable evidence base for demonstrating compliance with relevant approval conditions and commitments.

Monitoring under this Management Plan will be integrated with the Project's broader environmental monitoring framework, including that undertaken in relation to Construction Environmental Management Plans, Weed and Pest Management Plan, Cane Toad Management and Monitoring Plan, Receiving Environment Monitoring Program, Groundwater Monitoring Program, GDE Monitoring Program, Air Quality and Dust Monitoring Programs and Bushfire Management Plan.

### **4.4.2 Monitoring program**

The monitoring program will comprise:

- Compliance monitoring to confirm that required management measures and disturbance controls have been implemented;
- Habitat monitoring to detect changes in the extent, condition and connectivity of retained MNES habitat;
- Species monitoring and recording to identify the presence, injury or mortality of MNES;
- Threat monitoring to detect changes in pressures such as Cane Toads, pest species, weeds, erosion, sedimentation, dust and fire; and
- Incident-based monitoring following any event that has the potential to affect an MNES or its habitat.

The indicative monitoring requirements are provided in Table 4.4. Where a supporting management plan or monitoring program prescribes a more specific or more frequent monitoring requirement, that requirement will apply.

**Table 4.5: MNES Monitoring Program**

| Monitoring component                  | Monitoring requirements                                                                                                                                                                                                            | Location                                                                                          | Timing/frequency                                                                                                         |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Disturbance footprint compliance      | Validate clearing boundaries, exclusion zones, signage, approved access routes and compliance with Ground Disturbance Permits. Compare completed disturbance against the approved disturbance footprint.                           | Active disturbance areas and adjoining retained MNES habitat                                      | Before disturbance commences; during active clearing; and following completion of each clearing stage or work area       |
| Pre-clearance and clearing activities | Record completion of pre-clearance surveys and walkthroughs, fauna spotter/catcher attendance, fauna encounters, relocations, injuries and mortalities.                                                                            | Areas approved for clearing                                                                       | Before and during vegetation clearing                                                                                    |
| Retained habitat condition            | Inspect retained MNES habitat for unauthorised disturbance, vegetation damage, erosion, sediment deposition, weed establishment, pest activity, cattle access, fire damage, dust deposition and deterioration of habitat features. | Retained MNES habitat adjoining Project disturbance areas, including riparian corridors           | Six-monthly during construction and annually during operations, and following a relevant incident                        |
| Mertens' Water Monitor                | Record incidental observations, evidence of breeding or shelter use, injuries and mortalities.                                                                                                                                     | Mapped Mertens' Water Monitor habitat and receiving waterways potentially affected by the Project | Opportunisticly during Project activities and following relevant water releases, pollution events or habitat disturbance |
| Northern Blue-tongued Skink           | Record incidental observations, injuries and mortalities                                                                                                                                                                           | Mapped Northern Blue-tongued Skink habitat and adjoining retained habitat                         | Opportunisticly during Project activities and following clearing or other relevant disturbance events                    |

| Monitoring component                     | Monitoring requirements                                                                                                                                                | Location                                                                                                    | Timing/frequency                                                                                                  |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Painted Honeyeater                       | Record incidental observations                                                                                                                                         | Project Area                                                                                                | Opportunistically throughout construction and operations                                                          |
| Fork-tailed Swift                        | Record incidental observations                                                                                                                                         | Project Area                                                                                                | Opportunistically throughout construction and operations                                                          |
| Cane Toads                               | Monitor the occurrence, distribution and relative activity of Cane Toads                                                                                               | Waterbodies and watercourses                                                                                | In accordance with the Cane Toad Management and Monitoring Plan                                                   |
| Other pest fauna                         | Monitor the occurrence, distribution and relative activity of other pest fauna                                                                                         | Project Area                                                                                                | In accordance with the Weed and Pet Management Plan                                                               |
| Cattle exclusion fencing                 | Inspect fence condition, gates and evidence of cattle access to protected habitat.                                                                                     | Existing and proposed cattle exclusion areas                                                                | Six-monthly and following fire, flooding or other events likely to damage fencing                                 |
| Vehicle strike                           | Record fauna injuries and mortalities associated with vehicles and review the location, species and circumstances of each event to identify recurring risks.           | Project Area                                                                                                | Continuous recording                                                                                              |
| Erosion, sedimentation and water quality | Inspect erosion and sediment controls and review relevant receiving-environment monitoring results for evidence of Project-related impacts on downstream MNES habitat. | Disturbance areas, drainage lines, watercourse crossings, authorised release points and receiving waterways | In accordance with applicable erosion and sediment control plans and the Receiving Environment Monitoring Program |

#### **4.5 Adaptive management**

Adaptive management provides a framework for ensuring the management measures described in this Management Plan remain effective throughout the life of the Project. Monitoring, inspections and compliance assessments will be used to evaluate the effectiveness of mitigation measures in avoiding or minimising impacts on MNES and to identify opportunities for continual improvement.

Where monitoring, inspections or incident investigations identify that management measures are not achieving the intended performance outcomes, ECMPL will investigate the cause of the issue and implement appropriate corrective actions. Corrective actions may include modification of work practices, implementation of additional mitigation measures, increased monitoring, targeted training or updates to relevant management plans and procedures.

#### **4.6 Corrective actions**

Where monitoring, inspections or incident investigations identify that the performance criteria in this Management Plan are not being achieved, ECMPL will investigate the cause and implement appropriate corrective actions. Actions may include reinstating or strengthening environmental controls, modifying work practices, undertaking habitat remediation, increasing monitoring, implementing targeted weed or pest control, providing additional training or updating relevant management plans and procedures.

##### **4.6.1 Mortality of a protected matter during clearing**

In the event that a protected matter is killed, or is suspected to have been killed, as a result of vegetation clearing or associated ground disturbance activities, the following corrective actions will be implemented:

- **Cessation of clearing:** All vegetation clearing and associated ground disturbance activities within the affected area will immediately cease. The area will be made safe and no further clearing will occur until the incident has been investigated.
- **Retention and identification:** The carcass will be retained, where safe and practicable to do so, and appropriately stored to preserve its condition until the species has been positively identified by a suitably qualified person. The location and circumstances of the incident will be documented, including photographs and relevant spatial information.
- **Notification and reporting:** Where the animal is confirmed to be, or cannot reasonably be excluded as, a protected matter, the incident will be reported to the relevant regulatory agency in accordance with applicable legislative, approval and reporting requirements.
- **Investigation and corrective measures:** The incident will be investigated to determine the circumstances and contributing factors associated with the mortality. Appropriate corrective and/or additional mitigation measures will be identified and implemented prior to recommencement of clearing. These may include additional pre-clearance surveys, increased fauna spotter-catcher supervision, modification of clearing methods or sequencing, establishment or modification of exclusion areas, additional personnel training or other species-specific controls.
- **Recommencement of clearing:** Clearing within the affected area will only recommence once the investigation has been completed, required notifications have been made, and the ECMPL Environment Department is satisfied that appropriate

corrective measures have been implemented to minimise the risk of recurrence. Approval to recommence works will collectively be provided by the ECMPL Environment Department, Site Senior Executive (SSE) and Project Director.

#### 4.7 Emergency management

In the event of an emergency, the ECMPL Emergency Management Plan will be enacted. The Emergency Management Plan is designed to establish routines, which must be followed in an emergency, and to provide assigned personnel involved in incident and emergency response with a statement of their duties and responsibilities.

The SSE or their appointed designate assumes ultimate responsibility for managing emergency situations on site.

All incidents must be reported immediately to the area Supervisor, the SSE, Duty Manager, Department Manager and the Health and Safety team. The scene must be made safe and not interfered with until authorised to do so.

Upon receiving initial notification of an emergency from any source, an initial notification process will commence, with external reporting to follow, as defined by the Emergency Management Plan.

Emergency response capability for the Project is integrated with external emergency service providers and provides a structured scalable and flexible emergency management approach.

Following an unplanned or emergency event, a detailed review of impacts to the environment will be undertaken. Any corrective actions identified during the investigation to restore the environment or protect the environment from further harm will be recorded and assigned to site personnel or contractors to ensure required actions are implemented.

The Emergency Response Plan will be reviewed annually and after any event.

Table 4.5 presents key emergency contacts relevant to the Project:

**Table 4.6: Emergency service details**

| Emergency Service                      | Contact Details             |
|----------------------------------------|-----------------------------|
| Life-threatening emergency             | 000 (112 from mobile phone) |
| Cloncurry Police Station               | (07) 4742 8888              |
| Cloncurry Hospital                     | (07) 4742 4500              |
| Cloncurry Fire Station                 | (07) 4742 1642              |
| Queensland Fire and Rescue – Cloncurry | 13 74 68                    |
| MMG Dugald River Mine Emergency        | 0477 315 011                |
| Royal Flying Doctors                   | 1300 69 7337                |
| Emergency Management Queensland        | (07)3247 8511               |
| Site Senior Executive                  | 0417 406 643                |

| Emergency Service                     | Contact Details |
|---------------------------------------|-----------------|
| Site internal emergency radio channel | UHF Channel 20  |

#### 4.8 Reporting

The reports listed in Table 4.7 will be prepared, maintained and distributed as required to document and support implementation of this Management Plan.

**Table 4.7: Reporting**

| Report name                                                | Description                                                                                                                                                                                                                                                     | Schedule or triggers                                                                                                                                                   | Distribution                                                                                              |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Annual compliance report                                   | Summarises implementation of this Management Plan, compliance with EPBC Act approval conditions, performance against management measures, monitoring outcomes, incidents, non-compliances and corrective actions undertaken.                                    | Annually, or as otherwise required by EPBC Act approval conditions.                                                                                                    | NEPA, ECMPL Environment Department, HSE Manager and SSE.                                                  |
| Monitoring reports and dashboards                          | Present results from relevant monitoring programs, including receiving environment, groundwater, GDE, weed and pest, cane toad, dust and MNES-specific inspections or surveys.                                                                                  | Following each monitoring event, at the frequency specified in the relevant monitoring program, or where monitoring identifies an exceedance or potential MNES impact. | ECMPL Environment Department, HSE Manager and relevant regulators where required.                         |
| Vegetation clearing and ground disturbance permit register | Document approved GDP areas, clearing extents, pre-clearance survey outcomes, fauna spotter/catcher records, MNES observations, fauna relocations, injuries or mortalities, and compliance with authorised clearing limits.                                     | Prior to and following each clearing stage or ground disturbance campaign.                                                                                             | ECMPL Environment Department, HSE Manager, SSE, relevant contractors and regulators where required.       |
| Environmental incident and non-compliance reports          | Record incidents or non-compliance that cause or may cause impacts to MNES or MNES habitat, including fauna mortality or injury, unauthorised clearing, uncontrolled releases, sedimentation events, bushfire, pest incursions or non-compliant water releases. | Immediately following an incident or non-compliance and within timeframes specified in internal procedures or approval conditions.                                     | ECMPL Environment Department, HSE Manager, SSE, NEPA and other regulators where notification is required. |
| Audit reports                                              | Document internal or external audits of implementation of this Management Plan, including findings, evidence reviewed, non-conformances, observations and recommended improvements.                                                                             | Within 12 months of the Action commencing and every 3-years thereafter, or as specified by approval conditions                                                         | ECMPL management, Environment Department, HSE Manager, SSE and                                            |

| Report name | Description | Schedule or triggers | Distribution               |
|-------------|-------------|----------------------|----------------------------|
|             |             |                      | regulators where required. |

#### **4.9 Environmental training and awareness**

To ensure ECMPL employees and contractors are aware of the environmental risks, constraints, and responsibilities regarding environmental management of the Project, ECMPL will develop a range of training and awareness packages that will be implemented, as outlined in the sections below. The adequacy of these packages will be regularly reviewed to ensure they remain current and reflect the environmental risks of the Project. Records of all training activities and attendance will be maintained by ECMPL.

##### **4.9.1 Inductions**

All ECMPL employees and contractors will be inducted prior to commencing work on site.

The environmental component of the new employee induction will include:

- ECMPL's environmental policy
- An overview of environmental license and regulatory requirements
- significant environmental risks of the Project
- key environmental management and impact mitigation measures relevant to all employees
- roles and responsibilities, and site environmental contact details.

In the event that there are specific environmental management requirements relating to a contractor's activities on site, details of these requirements will be issued to the contractor in writing as a part of the induction.

All visitors to ECMPL will undergo a specific visitor induction prior to accessing the site. A specific environmental induction will also be conducted, providing a brief overview of ECMPL's environmental responsibilities.

##### **4.9.2 Toolbox talks**

Toolbox talks will be used to raise awareness and educate personnel on environmental issues relevant to the Project or tasks being performed. These toolbox talks will be tailored to specific environmental risks as necessary.

##### **4.9.3 Daily pre-start meetings**

The daily pre-start meeting is a tool for informing the workforce of the day's / shift's activities, safe work practices, environmental protection practices, and any other information that may be relevant to the day's work. Pre-start meetings may be project-wide or held for specific work areas. The environmental component of pre-starts will include any environmental matters that could potentially be impacted by the shift activities to be performed.

---

**5 DOCUMENT REVIEW**

This Management Plan will be reviewed and updated, where required, to reflect:

- Changes to Project activities or design that may alter risks to MNES;
- New information relating to MNES identified as occurring within the Project Area, including updated survey results or revised species listings;
- Outcomes of monitoring, compliance audits and incident investigations;
- Changes to relevant legislation, approval conditions or government guidance; and
- Recommendations arising from consultation with NEPA or other regulatory agencies.

Any revisions to this Management Plan will be documented through ECMPL's document control system and communicated to relevant personnel and contractors prior to implementation.

## 6 ABBREVIATIONS

| Abbreviation | Definition                                                      |
|--------------|-----------------------------------------------------------------|
| DCCEEW       | Department of Climate Change, Energy, the Environment and Water |
| DETSI        | Department of the Environment Tourism, Science and Innovation   |
| EA           | Environmental Authority                                         |
| ECMPL        | Eva Copper Mine Pty Ltd                                         |
| EPBC Act     | Environment Protection and Biodiversity Conservation Act 1999   |
| ESCP         | Erosion and Sediment Control Plan                               |
| GDE          | Groundwater-dependent Ecosystems                                |
| GDP          | Ground Disturbance Permit                                       |
| Harmony      | Harmony Gold Company Limited                                    |
| HSE          | Health, safety and environment                                  |
| LoO          | Likelihood of Occurrence                                        |
| MAW          | Mine-affected water                                             |
| NEPA         | National Environmental Protection Authority                     |
| MNES         | Matters of National Environmental Significance                  |
| Mt           | Million tonnes                                                  |
| REMP         | Receiving Environment Monitoring Program                        |
| SMART        | Specific, Measurable, Achievable, Relevant and Time bound       |
| SPRAT        | Species Profile and Threats Database                            |
| SSE          | Site Senior Executive                                           |
| TSF          | Tailings Storage Facility                                       |

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**ANNEXURE A – WEED AND PEST MANAGEMENT PLAN**



# **EVA COPPER MINE PROJECT**

## **WEED AND PEST MANAGEMENT PLAN**

**EVAMP001-EVA-EN-PLA-0031**

**DOCUMENT USERS** : **ALL HARMONY**  
**DEPARTMENT** : **ENVIRONMENT**  
**SUB-DEPARTMENT** : **EVA COPPER MINE PROJECT**  
**DOCUMENT OWNER** : **ENVIRONMENT SUPERINTENDENT**

| Revision | Prepared                  | Reviewed                                   | Approved  | Date       | Description    |
|----------|---------------------------|--------------------------------------------|-----------|------------|----------------|
| 0        | EMM Consulting<br>Pty Ltd | J. Maunder<br>L. Hennessy<br>T Schneekloth | S. Watson | 07/07/2026 | Issued for Use |

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## 1 INTRODUCTION

### 1.1 Background

The Eva Copper Mine Project (the Project) is a metalliferous mining operation owned and operated by Eva Copper Mine Pty Ltd (ECMPL), a wholly owned subsidiary of Harmony Gold Mining Company Limited (Harmony). The Project is situated in North West Queensland, approximately 75 kilometres (km) North West of Cloncurry and 95 km North East of Mount Isa (Figure 1.1).

The Project is approved under the *Environmental Protection Act 1994* and operates in accordance with Environmental Authority (EA) EPML00899613 issued by the Department of the Environment Tourism, Science and Innovation (DETSI).

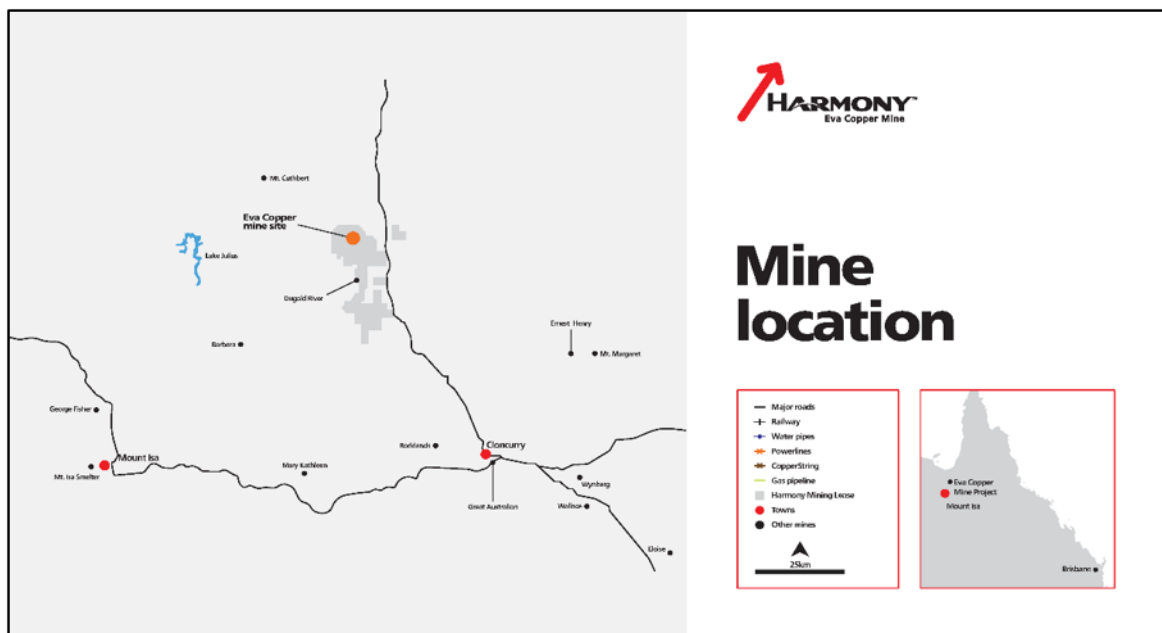


Figure 1.1: Location of the Eva Copper Mine Project

### 1.2 The Project

The Project comprises the extraction of 265 million tonnes (Mt) of sulphide and native copper ore using conventional drill and blast and truck and shovel mining methods. Mining will be undertaken across six mining areas being Little Eva, Blackard, Turkey Creek, Bedford, Lady Clayre and Scanlan. Little Eva and Blackard will provide (combined) 85% of the mining inventory for the Project.

The Project includes ancillary infrastructure comprising a Tailings Storage Facility, Waste Rock Dumps, Processing Plant, water production borefield, hybrid power plant setup and accommodation village.

The Project layout is shown in Figure 1.2.

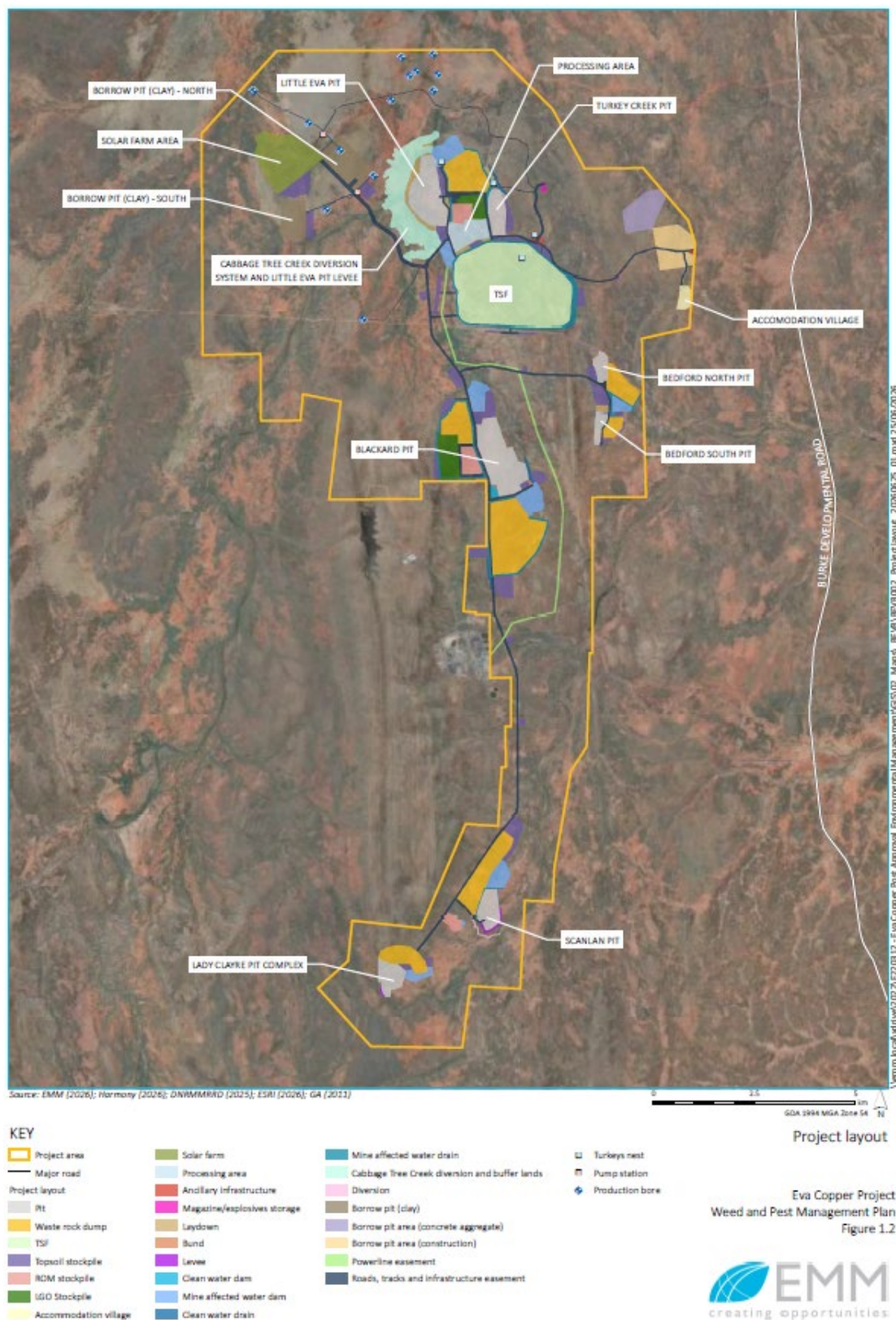


Figure 1.2: Project Layout

### 1.3 Purpose

This Weed and Pest Management Plan (WPMP) has been developed to identify pest flora and fauna species known to or occur, or that may occur, within the Project Area, and provide information on the assessment, management and monitoring strategies to be implemented.

The WPMP also provides a concise protocol to evaluate the effectiveness of the management strategies implemented and inform periodic reviews as part of an integrated adaptive management framework.

### 1.4 Objectives

The objectives of this WPMP are to:

- Define the pest flora and fauna species relevant to the Project Area.
- Present management measures to:
  - Quantify the current pest flora and fauna species within the Project Area;
  - Mitigate, control and where possible, eradicate the existing populations of pest flora and fauna species across the Project Area;
  - Prevent the further spread or increase in infestation of pest flora and fauna species within the Project Area as a result of the Project; and
  - Prevent the introduction and spread of new pest flora and fauna species within the Project Area as a result of the Project.
- Present a monitoring program to assess the effectiveness of the management measures over time and evaluate them against specific performance indicators
- Utilise the information collected and obtained as part of the monitoring program to periodically review and update the WPMP.

The WPMP is applicable to the construction, operation, and rehabilitation and closure phases of the Project. This WPMP does not include the management of biosecurity matters associated with aquatic weeds and pests, which have not been identified within the Project Area.

### 1.5 Terminology

Key terminology used through this WPMP are detailed in Table 1.1.

**Table 1.1: Key Terminology**

| Term               | Description                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biosecurity matter | A biosecurity matter is an organism (exclusive of humans), including a pathogen, disease or contaminant that has the potential to cause harm to another organism if transmission occurs. |
| Pest fauna         | A non-native fauna species that has become established within Australia. Pest fauna often threatens native species or ecological communities.                                            |
| Pest flora         | A non-native flora species that has become established within Australia. Pest flora often threatens native species or ecological communities.                                            |

| Term                | Description                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prohibited matter   | A prohibited matter is a biosecurity matter that is not present in Queensland. If the prohibited matter was to become present it would significantly impact Queensland's agricultural industries, natural environment, livestock, human health and people's livelihoods. Notification of a prohibited matter must be made to Biosecurity Queensland within 24 hours of the sighting. |
| Restricted matter   | A restricted matter is a biosecurity matter that is already present in Queensland. Restricted matters significantly impact Queensland's agricultural industries, natural environment, livestock, human health and people's livelihoods.                                                                                                                                              |
| Threatening process | Any process or activity that has potential to significantly harm a native species or ecological community.                                                                                                                                                                                                                                                                           |

## 2 REGULATORY FRAMEWORK

### 2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides protection for Australia's native biodiversity and places, including impacts to threatened species and ecological communities from invasive species.

Part 13 of the EPBC Act lists key threatening processes as those processes that pose a threat to the survival, abundance or evolutionary development of a native species or ecological community. Impacts of listed key threatening processes are managed through the development and implementation of threat abatement plans under Part 13 of the EPBC Act, which identify national research, management and other actions that will help to ensure the long-term survival of native species and ecological communities affected by threatening processes.

The following threat abatement plans are relevant to the Project and have been considered in the development of the WPMP:

- Threat abatement plan for the biological effects, including lethal toxic ingestion, caused by cane toads (DSEWPC 2011).
- Threat abatement plan for predation by Feral Cats 2024 (DCCEEW 2024).
- Threat abatement plan for predation, habitat degradation, competition and disease transmission by Feral Pigs (*Sus scrofa*) (2017) (DoEE 2017).

### 2.2 Biosecurity Act 2014

Queensland's *Biosecurity Act 2014* (Biosecurity Act) provides a legislative framework to manage restricted matters to address the impacts they have on the economy, environment, agriculture, tourism and society. The Biosecurity Act prohibits or restricts the introduction and spread of declared plant and animal pests within Queensland.

The Biosecurity Act defines an invasive plant (pest flora species) as:

- A plant species that has, or is likely to have, an adverse impact on a biosecurity consideration because of the introduction, spread or increase in population size of the species in an area; and
- Includes a plant species that is prohibited matter or restricted matter.

Prohibited weeds are a biosecurity matter that:

- Is not present in Queensland
- Would have a significant impact on Queensland's agricultural industries, natural environment, livestock, human health and people's livelihoods
- If found in Queensland must be reported to Biosecurity Queensland within 24 hours of the sighting.

Restricted weeds are a biosecurity matter that:

- Are established in Queensland
- Threaten Queensland's agriculture, natural environment, livestock, human health and people's livelihoods.

This WPMP uses the above definitions to quantify pest flora and fauna species.

There are seven categories of restricted matter under the Biosecurity Act. The specific restriction requirements also apply to a person when dealing with restricted invasive plants unless they have a restricted matter permit. Categories 2 to 5 related to restricted weeds, and are defined as follows:

- Category 2 – the invasive plant must be reported within 24 hours to Biosecurity Queensland on 13 25 23.
- Category 3 – the invasive plant must not be distributed either by sale, gift or released into the environment.
- Category 4 – the invasive plant must not be moved.
- Category 5 – the invasive plant must not be kept (Business Queensland 2021).

The *Australian Weeds Strategy* (Invasive Plants and Animals Committee 2016) outlines 32 introduced plants as Weeds of National Significance (WoNS). WoNS are identified as a priority current and future threat to Australia, and require strategic management to prevent, eradicate and/or minimise its impacts.

Specific actions are required to limit the spread and impact of these biosecurity matters by reducing, controlling or containing them.

ECMPL has a Statutory Duty Of Care (the general biosecurity obligation) under the Biosecurity Act (section 23) to take all reasonable and practical measures to prevent or minimise the biosecurity risk and must:

- Take all reasonable and practical steps to prevent or minimise each biosecurity risk.
- Minimise the likelihood of causing a biosecurity event, and limit the consequences if such an event is caused.
- Prevent or minimise the harmful effects a risk could have, and not do anything that might make any harmful effects worse.

### **2.3 North West Queensland Regional Biosecurity Plan**

The North West Queensland Regional Organisation of Councils and Southern Gulf Natural Resource Management group have partnered in the development of a Regional Biosecurity Plan (the RB Plan).

The RB Plan is a statutory requirement and provides guidance on how to reduce biosecurity risks associated with invasive plants and animals. In developing the Plan, consideration has been given to the roles of Federal, State and Local Government as well as the individual landowner level.

### **2.4 Cloncurry Shire Area Biosecurity Plan 2019-2023**

The Cloncurry Shire Area Biosecurity Plan (CSA Biosecurity Plan) (CSC 2018) sets a framework for the strategic management of invasive species including pest animals and weeds by taking a shared, engaging approach with all stakeholders. The aim of the CSA Biosecurity Plan is to reduce pest impacts, which aligns with state legislation.

Although the duration of the CSA Biosecurity Plan extended from 2019 until 2023, and as such has been exceeded, this plan is still considered an active resource and used by the Cloncurry Shire Council to establish a strategic and collaborative approach to the management of pest species within the Cloncurry Local Government Area.

## **2.5 National and State Strategies**

A range of national and state strategies developed to target the impacts of invasive species have been considered in the development of this WPMP:

- Australian Pest Animal Strategy 2017-2027 (IPAC 2016a).
- Australian Weed Strategy 2017-2027 (IPAC 2016b).
- National Wild Dog Action Plan (AWI 2020).
- National Feral Pig Action Plan 2021-2031 (NFPAP Steering Group 2021).
- Queensland's Feral Pig Management Action Plan 2026–2031 – draft plan (DPI 2026a).
- Queensland Wild Dog management strategy 2021-2026 (State of Queensland 2024).

### 3 MANAGEMENT PROGRAM

The WPMP has been developed for the management of pest flora and fauna species within the Project Area and comprises a combination of management and monitoring measures that will be applied at a multi-level scale, following an annual cycle.

Whilst some measures are to be implemented on an on-going basis (e.g. pest flora and fauna hygiene protocols, record keeping, etc.) or on an as-needed basis (e.g. incident reporting and investigation), others will follow a specific schedule based on the most suitable times for treatment and monitoring.

The WPMP schedule is presented in Figure 3.1, with the relevant steps addressed in detail in the sections below.

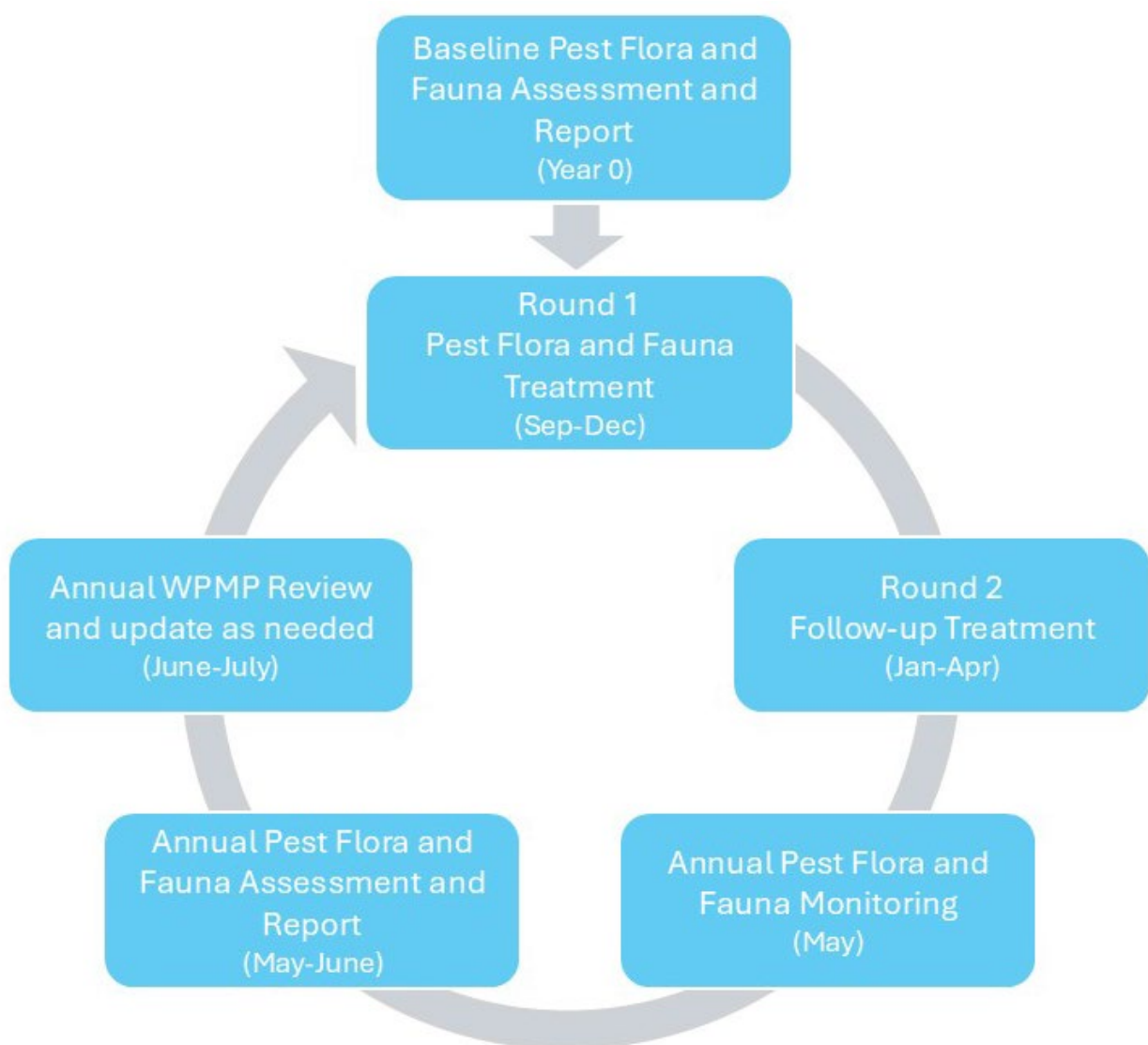


**Figure 3.1: Pest Flora and Fauna Management Schedule**

## 4 ROLES AND RESPONSIBILITIES

Roles / entities and corresponding responsibilities applicable to the implementation of this WPMP are detailed in Table 4.1 below. Individual responsibilities are to be allocated to ensure adequate implementation and completion of each task.

**Table 4.1: WPMP Roles and Responsibilities**

| Role / Entity                                                                     | Responsibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ECMPL Project Director and Site Senior Executive (SSE)                            | <ul style="list-style-type: none"> <li>Allocate sufficient resources for the implementation of this WPMP and ensure its application throughout the life of the Project.</li> <li>Manage the construction, operation, and post mine rehabilitation phases of the Project.</li> <li>Ensure that the requirements of any statutory approvals, legislation, and this WPMP are implemented and clearly defined in contractual documentation of all contractors involved with the Project.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                        |
| ECMPL Health Safety & Environment (HSE) Manager                                   | <ul style="list-style-type: none"> <li>Overall responsibility for implementation of this WPMP</li> <li>Ensure Project activities are undertaken in accordance with the requirements of this WPMP.</li> <li>Ensure all employees and personnel working within the Project are aware of and comply with the biosecurity requirements, including organising pest flora and fauna training and inductions.</li> <li>Oversee, coordinate and participate in preparation of risk management documentation and relevant internal procedures / protocols.</li> <li>Lead any investigations of incidents, non-compliances or complaints raised, and arrange for corrective actions to be implemented.</li> </ul>                                                                                                                                                                |
| ECMPL Environment Department                                                      | <ul style="list-style-type: none"> <li>Oversee the environmental performance of the biosecurity management within the Project.</li> <li>Arrange for information and educational material on pest flora and fauna as well as Project-specific pest flora and fauna protocols to be installed in areas accessible by all employees.</li> <li>Ensure environmental controls and management measures are established.</li> <li>Undertake audits of contractors to verify compliance with any legislative requirements and this WPMP, including regular inspections of work activities.</li> <li>Liaise with stakeholders on matters related to pest flora and fauna management.</li> <li>Ensure community members are appropriately notified of Project works involving pest flora and fauna management.</li> <li>Implement adequate record-keeping procedures.</li> </ul> |
| Suitably qualified contractor(s) – Pest Flora and Fauna Management and Monitoring | <ul style="list-style-type: none"> <li>Retain a copy of this WPMP and abide by requisite pest flora and fauna management, monitoring and reporting activities.</li> <li>Provide sufficient resources to ensure the effective implementation of this WPMP.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Role / Entity                 | Responsibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>• Coordinate required pest flora and fauna management and monitoring activities in accordance with this WPMP.</li> <li>• Collect data and records on all management and monitoring activities.</li> <li>• Produce an Annual Pest Flora and Fauna Report.</li> <li>• Report any incidents, non-compliances or complaints to ECMPL.</li> <li>• Participate in any investigations of complaints or non-conformances.</li> <li>• Participate in any audits initiated or requested by ECMPL.</li> </ul>                                                                                                                               |
| Contractor(s) – General/Other | <ul style="list-style-type: none"> <li>• Ensure all staff are trained/inducted to the Project as requested by ECMPL.</li> <li>• Comply with all biosecurity requirements and related protocols as required by ECMPL (e.g. pest flora hygiene protocols, wash-down of vehicles and equipment, production of relevant documents and certifications, etc.).</li> <li>• Provide relevant and timely information on construction/operation/rehabilitation activities that may impact on the environment.</li> <li>• Report any incidents, non-compliances or complaints to ECMPL.</li> <li>• Participate in any investigations of complaints or non-conformances.</li> </ul> |

---

## **5 EXISTING ENVIRONMENT**

The Project is located approximately 75 km North West of Cloncurry on the traditional lands of the Kalkadoon People. The Project Area falls within the Cloncurry Shire Council Local Government Area and is mapped within the Rural Zone pursuant to the *Cloncurry Shire Planning Scheme 2016*. Land uses within the region surrounding the Project Area primarily include mining activities and low-intensity cattle grazing.

The Project Area encompasses wide valleys and gently undulating plains, dissected by ephemeral creeks. Vegetation within the Project Area is predominantly remnant vegetation dominated by low open eucalypt woodlands, acacia shrublands and spinifex grasslands although has been impacted by cattle grazing, pest flora and fauna, and uncontrolled fires.

### **5.1 Pest Flora**

Desktop assessments undertaken for the Project Area, including a 20 km buffer around the Project Area, identified 39 pest flora species as potentially occurring. Seven of these pest flora species have been confirmed as present within the Project Area during ecological surveys.

The pest flora species and their status under Biosecurity Act as well as the Australian Weed Strategy WoNS listing are presented in Table 5.1.

Exotic flora species recorded within the Project Area are also prevalent throughout the region.

Of the eight pest flora species recorded during field surveys, Rubber Vine (*Cryptostegia grandiflora*) is classified as a WoNS and restricted Category 3 invasive plant under the Biosecurity Act. The flora pest species has been detected at several locations across the Project Area, particularly along Cabbage Tree Creek.

**Table 5.1: Pest Flora Species**

| Scientific name            | Common name   | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                     |
|----------------------------|---------------|-------------------------------------|-------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| <i>Andropogon gayanus</i>  | Gamba Grass   | Category 3                          | Yes               | -                                 | <br>Source: DPI 2026  |
| <i>Argemone ochroleuca</i> | Mexican Poppy | -                                   | -                 | -                                 | <br>Source: JCU 2026 |

| Scientific name            | Common name       | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                     |
|----------------------------|-------------------|-------------------------------------|-------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| <i>Calotropis gigantea</i> | Giant Rubber Bush | -                                   | -                 | Yes                               | <br>Source: JCU 2026  |
| <i>Calotropis procera</i>  | Rubber Bush       | -                                   | -                 | -                                 | <br>Source: DPI 2026 |

| Scientific name          | Common name        | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                  |
|--------------------------|--------------------|-------------------------------------|-------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <i>Carthamus lanatus</i> | Saffron Thistle    | -                                   | -                 | -                                 |  <p>Source: DPI 2026</p>           |
| <i>Arivela viscosa</i>   | Asian Spiderflower | -                                   | -                 | Yes                               |  <p>Source: Lucidcentral 2026</p> |

| Scientific name                 | Common name     | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                    |
|---------------------------------|-----------------|-------------------------------------|-------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <i>Convolvulus arvensis</i>     | Common Bindweed | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p> |
| <i>Cryptostegia grandiflora</i> | Rubber vine     | Category 3                          | Yes               | Yes                               |  <p>Source: DPI 2026</p>            |

| Scientific name                      | Common name  | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                 |
|--------------------------------------|--------------|-------------------------------------|-------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <i>Cryptostegia madagascariensis</i> | Rubber Vine  | Category 3                          | -                 | -                                 |  <p>Source: Lucidcentral 2026</p> |
| <i>Cylindropuntia sp</i>             | Devil's Rope | Category 3                          | -                 | -                                 |  <p>Source: DPI 2026</p>         |

| Scientific name       | Common name            | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                     |
|-----------------------|------------------------|-------------------------------------|-------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <i>Datura ferox</i>   | Long-spine Thorn-apple | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p>  |
| <i>Datura innoxia</i> | Recurved Thorn-apple   | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p> |

| Scientific name            | Common name       | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                    |
|----------------------------|-------------------|-------------------------------------|-------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <i>Datura leichhardtii</i> | Native Thornapple | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p> |
| <i>Datura metel</i>        | Downy Thornapple  | -                                   | -                 | -                                 |  <p>Source: Lucidcentral 2026</p>   |

| Scientific name              | Common name            | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                     |
|------------------------------|------------------------|-------------------------------------|-------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| <i>Dichanthium annulatum</i> | Sheda Grass            | -                                   | -                 | -                                 | <br>Source: JCU 2026  |
| <i>Echinochloa colona</i>    | Awnless Barnyard Grass | -                                   | -                 | -                                 | <br>Source: JCU 2026 |

| Scientific name              | Common name | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                     |
|------------------------------|-------------|-------------------------------------|-------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <i>Euphorbia hirta</i>       | -           | -                                   | -                 | -                                 |  <p>Source: JCU 2026</p>              |
| <i>Gynandropsis gynandra</i> | -           | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p> |

| Scientific name                   | Common name    | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                     |
|-----------------------------------|----------------|-------------------------------------|-------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| <i>Jatropha gossypifolia</i>      | Bellyache Bush | Category 3                          | Yes               | -                                 | <br>Source: DPI 2026  |
| <i>Lantana camara</i>             | Lantana        | Category 3                          | Yes               | -                                 | <br>Source: DPI 2026  |
| <i>Macroptilium atropurpureum</i> | Siratro        | -                                   | -                 | -                                 | <br>Source: DPI 2026 |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name                | Common name        | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                         |
|--------------------------------|--------------------|-------------------------------------|-------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------|
| <i>Malvastrum americanum</i>   | American fanpetals | -                                   | -                 | Yes                               |  <p>Source: JCU 2026</p>  |
| <i>Mesosphaerum suaveolens</i> | Hyptis             | -                                   | -                 | -                                 |  <p>Source: JCU 2026</p> |

| Scientific name             | Common name  | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                        |
|-----------------------------|--------------|-------------------------------------|-------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------|
| <i>Opuntia sp.</i>          | Prickly Pear | Category 3                          | Yes               | -                                 |  <p>Source: DPI 2026</p> |
| <i>Parkinsonia aculeata</i> | Parkinsonia  | Category 3                          | Yes               | -                                 |  <p>Source: DPI 2026</p> |

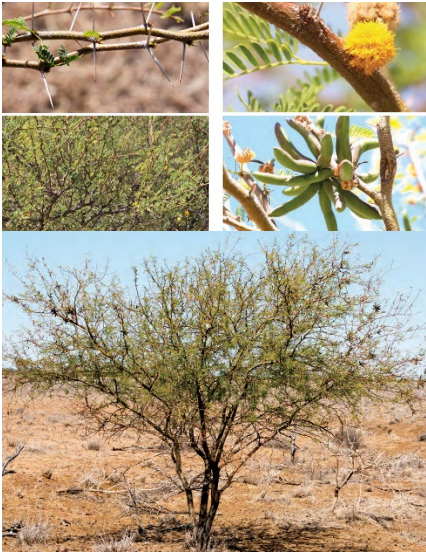
| Scientific name                 | Common name | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                    |
|---------------------------------|-------------|-------------------------------------|-------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------|
| <i>Parthenium hysterophorus</i> | Parthenium  | Category 3                          | Yes               | -                                 | <br>Source: DPI 2026 |
| <i>Pontederia crassipes</i>     | -           | -                                   | -                 | -                                 | <br>Source: DPI 2026 |

| Scientific name            | Common name    | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                  |
|----------------------------|----------------|-------------------------------------|-------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <i>Portulaca oleracea</i>  | Pigweed        | -                                   | -                 | Yes                               |  <p>Source: Lucidcentral 2026</p>  |
| <i>Prosopis glandulosa</i> | Honey Mesquite | -                                   | -                 | -                                 |  <p>Source: Lucidcentral 2026</p> |

| Scientific name          | Common name | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                                                                                              |
|--------------------------|-------------|-------------------------------------|-------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Prosopis pallida</i>  | Algarroba   | Category 3                          | -                 | -                                 |  <p>Source: JCU 2026</p>                                                                                       |
| <i>Prosopis velutina</i> | Mesquite    | Category 3                          | -                 | -                                 |   <p>Source: DPI 2026</p> |

| Scientific name          | Common name | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                         |
|--------------------------|-------------|-------------------------------------|-------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------|
| <i>Salvinia molesta</i>  | Salvinia    | Category 3                          | Yes               | -                                 |  <p>Source: DPI 2026</p>  |
| <i>Senna obtusifolia</i> | Sicklepod   | Category 3                          | -                 | -                                 |  <p>Source: DPI 2026</p> |

| Scientific name        | Common name    | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                         |
|------------------------|----------------|-------------------------------------|-------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------|
| <i>Sida acuta</i>      | Spinyhead Sida | -                                   | -                 | Yes                               |  <p>Source: JCU 2026</p>  |
| <i>Sida cordifolia</i> | Flannel Weed   | -                                   | -                 | -                                 |  <p>Source: JCU 2026</p> |

| Scientific name             | Common name | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                     |
|-----------------------------|-------------|-------------------------------------|-------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| <i>Tamarix aphylla</i>      | Athel Pine  | Category 3                          | Yes               | -                                 | <br>Source: JCU 2026  |
| <i>Vachellia farnesiana</i> | Mimosa Bush | -                                   | -                 | Yes                               | <br>Source: DPI 2026 |

| Scientific name           | Common name    | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                                                                                             |
|---------------------------|----------------|-------------------------------------|-------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Vachellia nilotica</i> | Prickly Acacia | Category 3                          | Yes               | -                                 |   <p>Source: DPI 2026</p> |

| Scientific name            | Common name   | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                                    |
|----------------------------|---------------|-------------------------------------|-------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <i>Xanthium spinosum</i>   |               | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p> |
| <i>Xanthium strumarium</i> | Noogoora Burr | -                                   | -                 | -                                 |  <p>Source: Weeds Australia 2026</p> |

| Scientific name            | Common name  | Biosecurity Act status <sup>1</sup> | WoNS <sup>2</sup> | Confirmed within the Project Area | Photo Identification                                                                                        |
|----------------------------|--------------|-------------------------------------|-------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------|
| <i>Ziziphus mauritiana</i> | Chinee apple | Category 3                          | -                 | -                                 |  <p>Source: DPI 2026</p> |

<sup>1</sup> Status as per the Biosecurity Act: prohibited matters, restricted matters (categories 1-7).

<sup>2</sup> Listing under the Australian Weeds Strategy WoNS list (Invasive Plants and Animals Committee 2016b).

### 5.1.1 Cloncurry Shire Priority Pest Flora Species

There are ten pest flora species that are classified as declared pest plants in the Cloncurry Shire and as such they are to be prioritised for management and control, along with WoNS and pest flora species listed under the Biosecurity Act. These species are listed in Table 5.2.

Of these species, eight were identified during the desktop assessment as potentially occurring in the Project Area and surrounding environment, and two Rubber Vine and Caltrope have been confirmed as present within the Project Area.

While priority for management and control actions is to be given to the existing occurrence of Rubber Vine and Caltrope, active monitoring for the other flora pest species is to be implemented to ensure early detection and timely control and eradication of any potential new infestation.

While these pest flora species have not been observed within the Project Area, their presence in the region increases the risk of them being established in the Project Area as a result of activities associated with the Project.

**Table 5.2: Cloncurry Shire Declared Pest Plants**

| Scientific name                 | Common name        | Biosecurity Act Status <sup>1</sup> | WoNS |
|---------------------------------|--------------------|-------------------------------------|------|
| <i>Calotropis spp.</i>          | Caltrope           | -                                   | -    |
| <i>Cryptostegia grandiflora</i> | Rubber vine        | Category 3                          | Yes  |
| <i>Kalanchoe spp.</i>           | Mother of Millions | Category 3                          | -    |
| <i>Leucaena leucocephala</i>    | Leucaena           | -                                   | -    |
| <i>Opuntia spp.</i>             | Prickly Pear       | Category 3                          | Yes  |
| <i>Parkinsonia aculeata</i>     | Parkinsonia        | Category 3                          | Yes  |
| <i>Parthenium hysterophorus</i> | Parthenium         | Category 3                          | Yes  |
| <i>Prosopis spp.</i>            | Mesquite           | Category 3                          | Yes  |
| <i>Tamarix aphylla</i>          | Athel Pine         | Category 3                          | Yes  |
| <i>Vachellia nilotica</i>       | Prickly Acacia     | Category 3                          | Yes  |

<sup>1</sup> Status as per the Biosecurity Act: prohibited matters, restricted matters (categories 1-7). <sup>2</sup> Listing under the Australian Weeds Strategy WoNS list (Invasive Plants and Animals Committee 2016b).

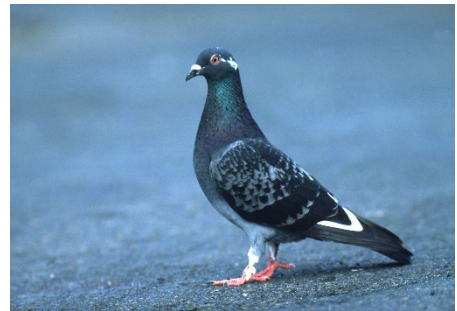
## 5.2 Pest Fauna

Desktop assessments undertaken for the Project and a 20 km buffer identified 24 pest fauna species as potentially occurring within the Project Area. Five of the 24 pest fauna species were confirmed as present during ecological surveys.

The species and their status under Queensland's Biosecurity Act 2014 are presented in Table 5.3.

**Table 5.3: Pest Fauna Species**

| Scientific name             | Common name    | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                                       |
|-----------------------------|----------------|-------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Birds</b>                |                |                                     |                                   |                                                                                                                            |
| <i>Acridotheres tristis</i> | Common Myna    | -                                   |                                   |  <p>Source: DPI 2026</p>                |
| <i>Anas platyrhynchos</i>   | Common Mallard | -                                   |                                   |  <p>Source: Australian Museum 2026</p> |

| Scientific name          | Common name   | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                                       |
|--------------------------|---------------|-------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <i>Columba livia</i>     | Rock Dove     | -                                   |                                   |  <p>Source: Australian Museum 2026</p>  |
| <i>Passer domesticus</i> | House Sparrow | -                                   | Yes                               |  <p>Source: Australian Museum 2026</p> |

| Scientific name             | Common name         | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                               |
|-----------------------------|---------------------|-------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <i>Spilopelia chinensis</i> | Spotted Turtle-dove | -                                   |                                   |  <p>Source: Birdlife 2026</p>   |
| <i>Sturnus vulgaris</i>     | Common Starling     | -                                   |                                   |  <p>Source: FeralScan 2026</p> |

| Scientific name            | Common name      | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                                      |
|----------------------------|------------------|-------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Mammals</b>             |                  |                                     |                                   |                                                                                                                           |
| <i>Bos taurus</i>          | European Cattle  | -                                   | Yes                               |  <p>Source: Australian Museum 2026</p> |
| <i>Camelus dromedarius</i> | One-humped Camel | -                                   |                                   |  <p>Source: FeralScan 2026</p>        |

| Scientific name               | Common name | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                              |
|-------------------------------|-------------|-------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <i>Canis familiaris</i>       | Feral dog   | Category 3, 4, 6                    |                                   |  <p>Source: FeralScan 2026</p> |
| <i>Canis familiaris dingo</i> | Dingo       | Category 3, 4, 5, 6                 | Yes                               |  <p>Source: DPI 2026</p>      |

| Scientific name       | Common name    | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                         |
|-----------------------|----------------|-------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------|
| <i>Capra hircus</i>   | Feral Goat     | Category 3, 4, 6                    |                                   |  <p>Source: DPI 2026</p>  |
| <i>Cervus elaphus</i> | Feral Red Deer | Category 3, 4, 6                    |                                   |  <p>Source: DPI 2026</p> |

| Scientific name       | Common name | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                                              |
|-----------------------|-------------|-------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <i>Equus asinus</i>   | Donkey      | -                                   |                                   |  <p>Source: FeralScan 2026</p>                 |
| <i>Equus caballus</i> | Horse       | -                                   |                                   |  <p>Source: Invasive Species Council 2026</p> |

| Scientific name     | Common name | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                               |
|---------------------|-------------|-------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <i>Felis catus</i>  | Feral Cat   | Category 3, 4, 6                    | Yes                               |  <p>Source: DPI 2026</p>        |
| <i>Mus musculus</i> | House Mouse | -                                   | Yes                               |  <p>Source: FeralScan 2026</p> |

| Scientific name              | Common name     | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                                       |
|------------------------------|-----------------|-------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <i>Oryctolagus cuniculus</i> | European Rabbit | Category 3, 4, 6                    |                                   |  <p>Source: DPI 2026</p>                |
| <i>Rattus rattus</i>         | Black Rat       |                                     |                                   |  <p>Source: Australian Museum 2026</p> |

| Scientific name      | Common name      | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                        |
|----------------------|------------------|-------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------|
| <i>Sus scrofa</i>    | Feral Pig        | Category 3, 4, 6                    | Yes                               |  <p>Source: DPI 2026</p> |
| <i>Vulpes vulpes</i> | European Red Fox | Category 3, 4, 5, 6                 |                                   |  <p>Source: DPI 2026</p> |

| Scientific name              | Common name           | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                              |
|------------------------------|-----------------------|-------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Reptiles</b>              |                       |                                     |                                   |                                                                                                                   |
| <i>Hemidactylus frenatus</i> | House Gecko           | -                                   |                                   |  <p>Source: DPI 2026</p>       |
| <i>Indotyphlops braminus</i> | Flowerpot Blind Snake | -                                   |                                   |  <p>Source: Landcare 2026</p> |

| Scientific name           | Common name      | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area | Photo Identification                                                                                         |
|---------------------------|------------------|-------------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Amphibians</b>         |                  |                                     |                                   |                                                                                                              |
| <i>Rhinella marina</i>    | Cane Toad        |                                     | Yes                               |  <p>Source: DPI 2026</p>  |
| <b>Fish</b>               |                  |                                     |                                   |                                                                                                              |
| <i>Gambusia holbrooki</i> | Eastern Gambusia | -                                   |                                   |  <p>Source: DPI 2026</p> |

Table 5.4: Pest Fauna Species

| Scientific name                   | Common name           | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area |
|-----------------------------------|-----------------------|-------------------------------------|-----------------------------------|
| <b>Birds</b>                      |                       |                                     |                                   |
| <i>Acridotheres tristis</i>       | Common Myna           | -                                   |                                   |
| <i>Anas (Anas) platyrhynchos</i>  | Common Mallard        | -                                   |                                   |
| <i>Columba (Columba) livia</i>    | Rock Dove             | -                                   |                                   |
| <i>Passer (Passer) domesticus</i> | House Sparrow         | -                                   | Yes                               |
| <i>Spilopelia chinensis</i>       | Spotted Turtle-dove   | -                                   |                                   |
| <i>Sturnus (Sturnus) vulgaris</i> | Common Starling       | -                                   |                                   |
| <b>Mammals</b>                    |                       |                                     |                                   |
| <i>Bos (Bos) taurus</i>           | European Cattle       | -                                   | Yes                               |
| <i>Camelus dromedarius</i>        | One-humped Camel      | -                                   |                                   |
| <i>Canis familiaris</i>           | Wild Dog              | Category 3, 4, 6                    |                                   |
| <i>Canis familiaris dingo</i>     | Dingo                 | Category 3, 4, 5, 6                 | Yes                               |
| <i>Capra hircus</i>               | Feral Goat            | Category 3, 4, 6                    |                                   |
| <i>Cervus elaphus</i>             | Feral Red Deer        | Category 3, 4, 6                    |                                   |
| <i>Equus (Asinus) asinus</i>      | Donkey                | -                                   |                                   |
| <i>Equus (Equus) caballus</i>     | Horse                 | -                                   |                                   |
| <i>Felis catus</i>                | Feral Cat             | Category 3, 4, 6                    | Yes                               |
| <i>Mus musculus</i>               | House Mouse           | -                                   | Yes                               |
| <i>Oryctolagus cuniculus</i>      | European Rabbit       | Category 3, 4, 6                    |                                   |
| <i>Rattus rattus</i>              | Black Rat             |                                     |                                   |
| <i>Sus scrofa</i>                 | Feral Pig             | Category 3, 4, 6                    | Yes                               |
| <i>Vulpes vulpes</i>              | European Red Fox      | Category 3, 4, 5, 6                 |                                   |
| <b>Reptiles</b>                   |                       |                                     |                                   |
| <i>Hemidactylus frenatus</i>      | House Gecko           | -                                   |                                   |
| <i>Indotyphlops braminus</i>      | Flowerpot Blind Snake | -                                   |                                   |

| Scientific name           | Common name      | Biosecurity Act status <sup>1</sup> | Confirmed within the Project Area |
|---------------------------|------------------|-------------------------------------|-----------------------------------|
| <b>Amphibians</b>         |                  |                                     |                                   |
| <i>Rhinella marina</i>    | Cane Toad        |                                     | Yes                               |
| <b>Fish</b>               |                  |                                     |                                   |
| <i>Gambusia holbrooki</i> | Eastern Gambusia | -                                   |                                   |

<sup>1</sup> Status as per the Biosecurity Act: prohibited matters, restricted matters (categories 1-7).

Pest fauna species that have been recorded within the Project Area include Feral Pigs (incidental sightings and remote cameras; Photograph 5.2), Cane Toads (captured in pitfall traps and observed during various ecology surveys), Dingos (captured on camera traps and observed several times incidentally), House Mice (observed in Project buildings), and Feral Cats (observed during nocturnal spotlighting). Feral Cats and Feral Pigs are listed as category 3,4,6 restricted matters under the Biosecurity Act.

Although Dingo is also listed as a category 3,4,5,6 restricted invasive animal under the Biosecurity Act, in Queensland, Dingoes are considered native wildlife under the *Nature Conservation Act 1992* (NC Act) and are protected in most national parks. Research indicates that Dingoes may, in some contexts, help regulate populations of native species and limit feral animal populations such as Feral Cats, Feral Pigs and Feral Goats (Letnic et al 2012; Newsome et al 2015). Some studies suggest that removal of Dingoes may be associated with increases in other pest species and environmental degradation (Newsome et al 2015).

### 5.2.1 Cloncurry Shire Priority Pest Fauna Species

There are nine pest fauna species that are classified as declared pest fauna in the Cloncurry Shire and as such they are to be prioritised for management and control, along with other pest fauna species listed under the Biosecurity Act. These pest fauna species are listed in Table 5.4.

Of these species, six (all mammals) were identified during the desktop assessment as potentially occurring in the Project Area and surrounding environment, and two (Feral Cat and Feral Pig) have been confirmed as present within the Project Area.

While priority for management and control actions is to be given to the existing infestations of Feral Cats and Feral Pigs, active monitoring for the other species is to be implemented to ensure early detection and timely control and eradication of any potential new infestation. While these species have not been observed within the Project Area, their presence in the region increases the risk of these species being established in the Project Area.

**Table 5.5: Cloncurry Shire Declared Pests**

| Scientific name                 | Common name              | Biosecurity Act Status <sup>1</sup> |
|---------------------------------|--------------------------|-------------------------------------|
| <i>Canis familiaris</i>         | Wild Dog                 | Category 3, 4, 6                    |
| <i>Capra hircus</i>             | Feral Goat               | Category 3, 4, 6                    |
| <i>Chortoicetes terminifera</i> | Australian Plague Locust | -                                   |

| Scientific name              | Common name      | Biosecurity Act Status <sup>1</sup> |
|------------------------------|------------------|-------------------------------------|
| <i>Felis catus</i>           | Feral Cat        | Category 3, 4, 6                    |
| <i>Oryctolagus cuniculus</i> | European Rabbit  | Category 3, 4, 6                    |
| <i>Sus scrofa</i>            | Feral Pig        | Category 3, 4, 6                    |
| <i>Vulpes vulpes</i>         | European Red Fox | Category 3, 4, 5, 6                 |

<sup>1</sup> Status as per the Biosecurity Act: prohibited matters, restricted matters (categories 1-7).

### 5.3 Potential Impacts

The presence and distribution of pest fauna species places considerable pressure on the natural environment and can lead to direct and indirect impacts on native biodiversity, which can ultimately result in a reduction and extinction of native species and communities.

Impacts potentially caused by pest flora and fauna species include, but are not limited to:

- Degradation and fragmentation of habitat for native species including Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES).
- Direct predation of native species.
- Poisoning of native species.
- Increased competition and loss of food and shelter for native fauna species.
- Competition with and reduction of native flora species
- Alteration of ecosystem structure and function
- Increased bushfire risk
- Introduction or spread of pathogens and disease
- Loss of genetic purity.

Activities associated with the Project have the potential to increase the abundance of pest flora species across the Project Area and facilitate dispersal to previously unimpacted areas. Uncontrolled movement of vehicles, equipment and personnel throughout the Project is the key vector of transmission, in particular vehicles and equipment sourced from regions beyond the Project Area which may introduce new species. Many pest flora species thrive on ground disturbance and will rapidly colonise disturbed areas in advance of native species recolonisation.

Project activities may also increase pest fauna abundance across the Project Area through direct (e.g. seeds of pest flora species brought in on construction equipment) and indirect means (e.g. by making the environment more favourable for predators to move through them). Creation of new access points into areas of intact vegetation may open new pathways for pest fauna species to disperse. In addition, the creation of artificial water sources with ponding water may increase the capacity of the area to support feral species such as Cane Toads, Pigs and Feral Cats. Uncontained waste sources may also attract feral fauna such as Wild Dog.

Unmitigated impacts associated with pest species, and in particular Feral Cats and Wild Dogs (i.e. feral domestic dogs, not phenotypically pure Dingoes) pose a threat to native fauna, and in particular, young animals.

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## **6 MANAGEMENT MEASURES**

### **6.1 Integrated Management Approach**

A strategic approach has been applied for the development of suitable management strategies for the Project, focusing on both preventative and control measures.

Pest flora and fauna species are best controlled through a strategic and integrated long-term management approach, ideally applied across a region, using several management techniques such as biological, cultural, physical and chemical control, for a more successful and thorough combined success. An overview of a selection of these techniques is provided in the sections below. These techniques should be combined to target multiple stages of the pest flora and fauna species lifecycle and varied so that tolerance to a particular control method is not promoted.

For existing pest flora and fauna populations, suitable control measures will be implemented to the extent associated with the classification and priority of the pest flora and fauna species (see Section 6.1 and 6.2) as well as the location, extent and severity of infestation.

### **6.2 Pest Flora Management**

The four stages of pest flora species management outlined in the Australian Weed Strategy 2017 – 2027 (DAWE 2017) include prevention, eradication, containment and asset protection. In alignment with this strategy preventative measures such as strict hygiene protocols and awareness assist with minimising the risk of establishment of new or expanding infestations throughout the Project Area will be implemented. Control measures focus on addressing the existing infestations and provide harm reduction if an infestation occurs.

This section presents recommended management activities and strategies for the control and, where possible, eradication of known pest flora species present within the Project Area, as well as for the prevention of introduction and further spread of new pest flora species.

The pest flora species treatment schedule will be created based on the following hierarchy to determine treatment priorities:

1. Prohibited or restricted matters not previously recorded within the Project Area.
2. Other priority pest flora species not previously recorded within the Project Area.
3. Existing infestations of priority pest flora species within the Project Area, where located in an area of high biodiversity value.
4. Existing infestations of priority pest flora species within the Project Area, along waterways or water bodies.
5. Existing infestations of priority pest flora species within the Project Area, along roads or access tracks.
6. Small or scattered infestations of priority pest flora.
7. Other pest flora.

Additional factors that will be considered when developing the treatment schedule and plan include the Project's schedule (comprising construction, operations and closure), access constraints, resourcing constraints, seasonal variations, and other Management Plan requirements for the Project.

Pest flora species management will follow an initial 1-year cycle of treatment (Year 1), initially based on the information provided by the Baseline Pest Flora And Fauna Assessment (see Section 7.1), followed by an independent field audit of treatment success to be undertaken as part of the annual monitoring program (see Section 7.2).

It is recommended to schedule two rounds of pest flora treatment for each year: an initial intensive round in the September to December period and a follow-up treatment round to be undertaken in the January to March period. This will allow to cover for seasonal variations and facilitate identification of pest flora species regrowth for repeated treatments. For increased effectiveness, the treatment schedule should be tailored to the target species.

For the first two years of the WPMP implementation, it is recommended to schedule additional inspections of treatment sites following the initial intensive round of treatment, to evaluate the effectiveness of the control measures implemented and allow for changes/improvements as needed.

The annual post-treatment audit will be scheduled in the May to June period, ideally no sooner than four weeks from treatment to be able to capture pest flora species dieback. The results of the audit will be compiled in an Annual Pest Flora and Fauna Report (see Section 7.2) along with the results for the pest fauna section.

The information will be used to confirm the suitability of the WPMP and provide recommendations and updates to be implemented to maximise effectiveness and efficiency of the management plan. Any resulting change will be applied to the subsequent follow-up yearly treatments.

### **6.2.1 General Principles**

The following general principles apply to pest flora species management in the Project Area:

- Persons implementing this WPMP must be suitably qualified, that is:
  - Demonstrably skilled and experienced in the methods required; and
  - Where treatment of weeds with herbicides is required, hold the appropriate licences. An Agricultural Chemicals Distribution Control (ACDC) licence and completion the following units of competency is required, as a minimum:
    - AHCCHM307 – Prepare and apply chemicals to control pest, weeds and diseases
    - AHCCHM304 – Transport and store chemicals.
- Low impact physical control rather than herbicide use is the preferred method in sensitive areas, such as riparian corridors.
- Herbicides used in sensitive areas, such as riparian corridors must be approved for use in such Environments.
- All use of herbicides must be done in accordance with the product label.
- Herbicide treatment must only occur when plants are actively growing.
- Where herbicides are used, records must be kept in accordance with the requirements of Chemical Usage (Agricultural and Veterinary) Control Regulation 2017 and the *Agricultural Chemicals Distribution Control Act 1966* (see Section 6.4.5 for further detail).
- All treatment methods will require follow-up treatment and monitoring to ensure effectiveness.

### **6.2.2 Recommended Pest Flora Species Treatment**

Due to the high variability in species-specific characteristics and lifecycles and corresponding available treatment methods, a range of techniques and approaches are proposed as part of this WPMP. Control and treatment will be undertaken appropriate to the pest flora species being treated, and cognisant of health and safety and statutory considerations which may limit the range of control methods that can ultimately be implemented. A summary of the recommended treatment methods and timing for each priority pest flora species is provided in Attachment A.

#### **Chemical Control**

The application of herbicide is a common and effective technique for the management of pest flora species, and in some cases might be the only practical, cost-effective and selective method of control (CISS 2025).

Herbicides are applied with a range of techniques, based on their chemical and absorption characteristics, as well as the characteristics of the target species. Application methods include foliar spray, basal bark spraying, stem injection, cut stump application, cut and swab, stem scrape and spot application.

Following baseline pest flora surveys, the Baseline Pest Flora and Fauna Report will outline a refined list of target pest flora species. A detailed herbicide matrix including application rates will be developed for these species to ensure an appropriate and strategic chemical control approach is implemented and applied to target species.

Aside from the selection of the correct herbicide for the target pest flora species, the following factors need to be considered:

- Growth stage of the plant – in most cases, pest flora species must be actively growing to be vulnerable to herbicide treatments (thus application in warmer, wetter months is recommended).
- Known/possible herbicide resistance.
- Conditions such as wind speed and direction, and the likelihood of rainfall.
- Proximity to waterways – to prevent accidental environmental contamination.

#### **Physical Control**

Physical control is the removal of pest flora species by physical or mechanical means, such as mowing, grazing, mulching, tilling or by hand extraction. The method used often depends on the area of weeds to be managed, what the land is used for, physical characteristics and the value of the land (CISS 2025).

It is important that, when using physical control, any item that can move from an infested site to an un-infested site, such as machinery, vehicles, tools and even footwear, is cleaned free of seed before moving, to stop the spread of pest flora species to new areas. The timing of physical control is also a critical factor affecting its implementation.

#### **Controlled Burns**

Burning removes the above-soil body of the pest flora species killing most of the plants. If carried out before seed is set it can prevent the further spread of weeds. Burning can be undertaken over a wide area with minimal human input. If burning is used as a control method, caution should be exercised to minimise the risk of harm to the environment, neighbouring properties, and to those undertaking the activity (CISS 2025).

Burning can also create newly-cleared land that provides opportunities for colonisation by other pest flora species. As such, it is strongly recommended that if controlled burning is implemented as a control method, the area is monitored for early detection of onset of pest flora species and adequate complementary treatments are implemented. Implementing controlled burns is subject to approval from relevant Project authorities approval.

### **Biological Control**

The introduction of natural enemies such as insects or pathogens that solely target pest flora species is a fairly effective, sustainable and self-sufficient method of control. However, not all pest flora species are suitable for biological control, and developing a successful strategy can require a substantial time and financial investment. As such, this method is rarely applied if other more effective techniques are available (CISS 2025).

It is critical that the biological control agents introduced do not become pests themselves. Considerable testing is to be done prior to the release of biological control agents to ensure they will not pose a threat to non-target species such as native plants. Before commencing the search for biological control agents, agreement needs to be sought with initial application through the Invasive Plants and Animals Committee to target the pest flora species for biological control.

#### **6.2.3 Rubber Vine**

Rubber Vine is classified as a Category 3 restricted matter under the Biosecurity Act and is a WoNS. Rubber Vine has been detected in several locations within the Project Area and is therefore a priority pest flora species for treatment.

Rubber Vine is one of North Australia's most significant riparian weeds, and its presence in the broader Cloncurry region poses serious ecological, operational and compliance risks for land managers. Controlling Rubber Vine within the Project Area is essential not only for statutory compliance but also for ensuring the long-term success of rehabilitation along the Cabbage Tree Creek corridor.

Rubber Vine requires a coordinated, multi-stage control approach to ensure that mature plants, suckering stems and newly germinated seedlings are treated before they can contribute additional seed to the seedbank.

A detailed and Project-specific Treatment Plan for Rubber Vine is presented in the Cabbage Tree Creek Diversion Rubber Vine Treatment Plan (EVAMP001-EVA-EN-PLA-0020), and it is to be consulted in conjunction with this WPMP.

### **6.3 Pest Fauna Management**

This section presents recommended management activities and strategies for the control and, where possible, eradication of known pest fauna species present within the Project Area, as well as for the prevention of the introduction of new species. The Project is currently subject to low levels of pest fauna species infestation and, as such, the focus is to avoid further impacting the quality of retained areas of habitat along riparian corridors and in areas of contiguous remnant vegetation.

Pest fauna species management will follow an initial 1-year cycle of treatment (Year 1), based on the information provided by the Baseline Pest Flora and Fauna Assessment (see Section 7.1), followed by an independent field audit of treatment success to be undertaken as part of the annual monitoring program (see Section 7.2).

For increased effectiveness, the pest fauna species treatment schedule should be tailored to the target species and undertaken as an on-going effort (e.g. trapping) or during optimal periods (linked to breeding seasons) depending on the treatment strategy applied.

The annual post-treatment audit will not be completed by the same person or contractor that completed the treatment – to prevent potential bias – and will be completed by a Suitably Qualified Person (SQP). An SQP, in this instance, is a person who has qualifications and experience conducive to the identification of the target pest species, appropriate treatment methods, and field analysis of abundance estimates.

The results of the audit will be compiled in an Annual Pest Flora and Fauna Report (see Section 7.2) along with the results for the pest flora species section. The information will be used to confirm the suitability of the WPMP and provide recommendations and updates to be implemented to maximise effectiveness and efficiency of the management plan. Any resulting change will be applied to the subsequent follow-up yearly treatments.

### **6.3.1 Recommended Pest Fauna Treatment**

Due to the high variability in species-specific characteristics and corresponding available treatment methods, a range of techniques and approaches are proposed as part of this WPMP. Control and treatment will be undertaken appropriate to the pest fauna species being treated, and cognisant of health and safety and statutory considerations which may limit the range of control methods that can ultimately be implemented.

#### **Baiting**

Baiting is a cost-effective and proven management technique for several pest fauna species. It consists in the preparation and deployment of species-specific baits laced with selective dosage and types of poisons. Baits are to be prepared by an SQP, with demonstrated experience and qualifications on the preparation of baits that target only the desired pest species to be controlled and

To minimise risk to other fauna (native or domestic) and humans baits need to be handled and used appropriately as per manufactures guidelines.

#### **Trapping**

The deployment of fauna traps is a common alternative or complementary technique to baiting. Trapping involves initial live capture followed by humane euthanasia of the pest fauna species captured.

Species-specific traps and deployment methods are available for different pest fauna species and are to be selected depending on the extent of the infestation, location, accessibility, and presence of other fauna within the Project Area. Trapping devices are to be deployed and inspected in accordance with the best practice guidelines and legislation.

Traps are to be selected, deployed and inspected by an SQP with licensing and permit required to humanely euthanise the pest animal if captured alive. Euthanasia must produce rapid unconsciousness and subsequent death without any evidence of pain or distress and must be conducted in accordance with the *Animal Care and Protection Act 2001*. The animal must be confirmed to be dead before leaving when conducting euthanasia and safely disposed of according to relevant regulations.

## Shooting

Shooting can be an effective control measure as it can have a high level of success within a relatively short amount of time. Shooting is however a dangerous method with risks associated with it that can have serious consequences if safety standards are maintained. Therefore, shooting of pests is to be undertaken by a suitably licensed and qualified person. This control method requires coordination and agreement with relevant stakeholders and government bodies. All pest fauna individuals must be confirmed to be dead before leaving the Project Area and safely disposed of according to relevant regulations.

Whilst the extent of pest fauna species presence within the Project Area is unknown, species-specific control methods outlined in Table 6.1 can be implemented if the Baseline Pest Fauna Assessment uncovers any of the Cloncurry Shire declared pest species. Due to the ecological value of Dingos/Wild Dogs in controlling other pest fauna species (Letnic et al 2012; Newsome et al 2015), not management is proposed to be implemented unless future assessments deem it necessary.

**Table 6.1: Control Methods for Cloncurry Shire Declared Pests**

| Scientific name                 | Common name              | Management effort                                                                                                                                                                                                                             |
|---------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Canis familiaris</i>         | Wild Dog                 | <ul style="list-style-type: none"> <li>Ground baiting – 1080 and PAPP poison baits selectively positioned</li> <li>Shooting - opportunistic method (DAF 2020b)</li> </ul>                                                                     |
| <i>Capra hircus</i>             | Feral Goat               | <ul style="list-style-type: none"> <li>Shooting – ground shooting or shooting from helicopter</li> </ul>                                                                                                                                      |
| <i>Chortoicetes terminifera</i> | Australian Plague Locust | <ul style="list-style-type: none"> <li>Not current effective control method known</li> <li>Monitor for plague populations and map infestations (CSC 2018).</li> </ul>                                                                         |
| <i>Felis catus</i>              | Feral Cat                | <ul style="list-style-type: none"> <li>Poisoning – fresh meat baits containing 1080 poison baits and use of Felixer devices Trapping – baited cage traps (DAF 2020d)</li> <li>Shooting - highly selective and carried out at night</li> </ul> |

| Scientific name              | Common name      | Management effort                                                                                                                                                                                                                                                                            |
|------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Oryctolagus cuniculus</i> | European Rabbit  | <ul style="list-style-type: none"> <li>Baiting – 1080 and pindone poison baits placed along bait trails</li> <li>Fumigation – before and during breeding season in burrows</li> <li>Trapping – cage trap/barrel trap</li> <li>Shooting – when rabbits are most active (DAF 2020e)</li> </ul> |
| <i>Sus scrofa</i>            | Feral Pig        | <ul style="list-style-type: none"> <li>Poisoning – 1080 poison baits selectively positioned (DAF 2020a)</li> <li>Trapping – funnel entrance/tripped-gate entrance/pig-specific trigger</li> <li>Shooting – ground shooting or shooting from helicopter</li> </ul>                            |
| <i>Vulpes vulpes</i>         | European Red Fox | <ul style="list-style-type: none"> <li>Ground baiting – 1080 and PAPP poison baits selectively positioned</li> <li>Shooting – highly selective and carried out at night (DAF 2020c)</li> </ul>                                                                                               |

### 6.3.2 Feral Cat

The State and National vertebrate pest management guides advocate for a comprehensive, integrated approach to Feral Cat control. This includes a combination of coordinated methods such as fencing, baiting, trapping and shooting.

The main treatment technique that will be applied to the Project for the control of Feral Cats is the deployment of Felixer Grooming Traps (Thylation Pty Ltd), which uses an array of Light Detection and Ranging (LiDAR) beams to detect the shape and movement of a Feral Cat and sprays a lethal dose (8 milligrams (mg)) of 1080 toxic gel onto the fur of the Feral Cat from up to four metres away. The Feral Cat instinctively grooms itself to remove the gel and in doing so ingests a lethal dose of the poison.

Shooting and trapping can also be implemented to manage the Feral Cat population. A combination of management measures will result in higher success rates and suppress the Feral Cat population.

A Project-specific protocol for the transport, deployment, inspection and maintenance of traps for Feral Cat is presented in the Felixer Grooming Trap - Safe Work Instruction (EVAMP001-EVA-EN-SWI-0007), and it is to be consulted in conjunction with this WPMP.

### **6.3.3 Feral Pig**

The State and National vertebrate pest management guides advocate for a comprehensive, integrated approach to Feral Pig control. This includes a combination of coordinated methods such as fencing, baiting, trapping and shooting.

Poisoning is an efficient and cost-effective method for large-scale population reduction and is probably the most heavily relied on control method. Baits containing 1080 (sodium fluoroacetate) or sodium nitrite are used. To increase effectiveness and minimise risk to non-target animals, pre-feeding pigs with non-toxic bait is a crucial step (DPI 2026a).

Trapping is a key method for controlling Feral Pigs in more populated areas, on smaller properties, and to remove survivors after baiting programs. This method can be used anywhere and creates low disturbance to the population but can be labour intensive. Traps can be made pig-specific to reduce the risk to native animals (DPI 2026a).

Shooting can also be implemented to control Feral Pigs. A combination of management measures will result in higher success rates and suppress the Feral Pig population.

Best practice for Feral Pig management in relation to seasonal conditions involves timing control efforts to coincide with seasonal behaviours of pigs, environmental conditions, and land management activities (DPI 2026a).

### **6.3.4 Cane Toad**

Cane Toads are a highly invasive species that poses a threat to native fauna and to two MNES that are known to occur within the Project Area. The Conservation Advice for Mertens' Water Monitor and Northern Blue-tongued Skink, identify Cane Toads as the greatest threat to both species, due to lethal toxicity encountered from ingestion (DCCEEW 2023a; DCCEEW 2023b). Ongoing management is required for the life of the Project to prevent an increase in Cane Toad population density and their expansion into previously unoccupied areas within the Project Area.

As such, management and control of Cane Toads is a priority for the Project. A detailed and Project-specific management plan for Cane Toad is presented in the Cane Toad Management Plan (EVAMP001-EVA-EN-PLA-0030), and it is to be consulted in conjunction with this WPMP.

## **6.4 General Provisions**

### **6.4.1 Hygiene Procedures**

It is a requirement for all employees and personnel working within the Project to be familiar and comply with all Project's biosecurity requirements and procedures.

Hygiene procedures for vehicles, mobile plants, and equipment are essential as a preventative and containment measure to avoid accidental introduction, dispersal and further spreading of pest flora material, seeds, and pest flora or fauna contaminated mud/soil.

Detailed requirements and instructions related to weed and pest hygiene procedures as well as other Project-specific biosecurity matters are presented in the Eva Copper Mine Project – Biosecurity Management Procedure (EVAMP001-EVA-EN-PRO-0002).

### **Vehicles and equipment**

All vehicles, mobile plants, and equipment entering and working within the Project Area must be clean of pest flora and fauna components or contaminants (e.g. seeds, plant parts, eggs, parasites, etc.). A Weed Hygiene Declaration must be completed for each item by an SQP and submitted to the ECMPL Environment team. An SQP, in this instance, is a person who has completed *AHCBIO203 - Inspect and clean machinery, tools and equipment to preserve biosecurity* (or any equivalent training that may supersede it) and is authorised to complete a Weed Hygiene Declaration.

The declaration is to be completed for all vehicles, mobile plants, and equipment:

- Prior to mobilisation and demobilisation to and from the Project Area.
- Travelling onto Exploration Tenements from the Project or from Cloncurry, as requested by the landholder.
- After having travelled or worked through areas with known high pest flora infestations.
- At minimum once a week.

Suitable wash-down facilities and cleaning bays are to be installed within the Project Area and used by all employees according to the Project's biosecurity procedures and protocols to prevent pest flora introduction or further dispersal across the Project Area.

The wash-down facilities are to be located far from any watercourses and fitted with a drainage system that prevents any accidental spillage, flow, or runoff into the surrounding environment. Additionally, the wash-down bay discharge water is to be treated with herbicides to control the weeds that are washed off the vehicles, mobile plants, and equipment. If there is an outbreak of a pathogen in the region a disinfectant protocol for vehicles may be considered to protect environmental or agricultural assets.

### **Personal gear**

Personal protection equipment (PPE), gear, and footwear are to be cleaned and inspected for pest flora and fauna contaminants:

- Prior to entering the Project Area.
- When working within a known contaminated area within the Project Area, prior to relocating to any other area.

### **Groundwork Material**

All groundwork material (e.g. organic material, soil, fill, mulch and aggregate) coming into the Project Area will need to be inspected – and where relevant treated or replaced – and certified as 'weed and disease free' prior to being brought into the Project Area to ensure it does not pose a biosecurity risk through the introduction of pest flora species.

Vendors supplying materials with the potential to contain pests will be required to provide written assurance that all supplied materials are free from any pests.

#### **6.4.2 Waste Disposal**

All waste that might attract pest fauna species (apart from baits used as part of pest management activities) is to be contained and adequately disposed of in appropriate and sealed waste containers or at dedicated disposal facilities present within the Project Area.

### **6.4.3 Awareness and Education**

ECMPL is to ensure all employees and personnel working within the Project Area are aware of and comply with all biosecurity requirements. This is achieved through the development and implementation of suitable education and information processes, including regularly scheduled toolbox talks, as well as provision of detailed requirements and expectations as part of contract terms and conditions.

### **6.4.4 Compliance and Record-keeping**

Users of agricultural or veterinary chemical products must always read the label and any permit before using the product and strictly comply with the directions on the label and the conditions of any permit.

To view usage permits or product labels go to the Australian Pesticides and Veterinary Medicines Authority website [www.apvma.gov.au](http://www.apvma.gov.au).

Under the *Chemical Usage (Agricultural and Veterinary) Control Regulation 2017* all users of agricultural chemicals must record:

- The full name and contact details, including address and telephone number, of:
  - The person who used the product;
  - The owner or occupier of the land on which the product was used; and
  - Anyone who was responsible for organising, overseeing or directly supervising the chemical use.
- The qualifications of the user and anyone responsible for organising or directly supervising the chemical use.
- Sufficient particulars to identify the product or products used. Typically, this would include the registered trade name of the product as found on the label, the registration number and label number assigned to the product by the Australian Pesticides and Veterinary Medicines Authority, the name of the manufacturer of the chemical and the name and amount of the active constituent of the chemical
- Details identifying the exact location of the land treated, including distance and directions from the nearest town site (e.g. the Real Property Description Number found on the rates notice for the property, together with a farm map detailing paddock names or numbers). Use of global positioning system (GPS) devices may also be helpful in determining and recording the exact location of the land treated
- The date or dates of the chemical application.
- The equipment and methods used to apply the product (e.g. boom-sprayer, handgun, type of nozzle used).
- Details of weather conditions (temperature, relative humidity, wind speed and direction, cloud cover, amount of any rain) before, during and after the product was used and the times the observations were made. It is good practice to also note the time of any changes to conditions, such as the wind velocity and direction, during chemical application.
- The rate at which the product was used (e.g. per hectare) or enough information to calculate the rate, for example, the quantity, concentration, total spray volume and total area with respect to the chemical application.
- A description of the type of land/crop treated or a situation in which the chemical was used (e.g. roadsides, fallow).
- The purpose for which the chemical was applied (e.g. control of Rubber Vine).

- Any details stipulated in product label instructions or permit conditions.

Detailed and accurate records on matters related to the management of pest flora and fauna species within the Project Area are to be produced and adequately logged through the dedicated channels, in accordance with ECMPL internal policies and procedures as well as with statutory commitments and legislative requirements, for reference, record-keeping and compliance.

All records and reports will be kept on file for the life of the Project.

Records of all pest flora and fauna sightings, both opportunistic or as part of the management and monitoring rounds, will be maintained within a dedicated database and regularly updated.

For all management treatment measures implemented, information on the location, target species, treatment activity undertaken, quantity of treatment applied (if relevant), area covered and – pending follow-up or audit – outcome of treatment, are to be recorded and uploaded in the database.

To inform future management actions and assess management effectiveness, detailed reporting of monitoring and management activities will be conducted (see Sections 7 and Section 10).

## **7 MONITORING AND REPORTING**

### **7.1 Baseline Pest Flora and Fauna Report**

A Baseline Pest Flora and Fauna Assessment is to be completed for the Project Area to support the implementation of this WPMP (year 0) to:

- Define scope and survey effort
- Verify and contemporise the information on presence, distribution, extent and severity of infestation of the pest flora and fauna species within the Project Area.
- Confirm the relevance and effectiveness of the measures proposed within the WPMP for the management of pest flora and fauna species within the Project Area.
- Provide information for strategic planning of management measures to be implemented.
- Provide a baseline benchmark to assess and rate success of management measures implemented and progress over time toward the set objectives and performance targets.

The Baseline Pest Flora and Fauna Assessment should comprise of a desktop review of existing information on pest flora and fauna species presence within the Project Area and a field component to validate and collect data to be undertaken during suitable time of the year for effective pest flora detection.

The Baseline Pest Flora and Fauna Assessment field investigations of both pest flora and pest fauna monitoring to inform of baseline data to be compared against in future monitoring events and will help inform of which species require management.

The results will be documented in a baseline pest flora and fauna summary report (Baseline Pest Flora and Fauna Report), to be consulted and referred to when analysing data trends and progress over time, as well as for preparation of all subsequent Annual Reports.

The Baseline Pest Flora and Fauna Report will make use of Global Information Systems (GIS) as a method of quantifying the location and extent of pest flora and fauna infestation within the Project Area.

### **7.2 Annual Pest Flora and Fauna Report**

An annual round of pest flora and fauna monitoring will be completed to assess the status of existing invasions, success of applied treatment, as well as detect or investigate new invasions within the Project Area.

For the pest flora component, the annual monitoring round should be undertaken in May, following the completion of the second round of treatment, optimally around 4-weeks from rain events to capture the growth of plants.

Targeted pest flora and fauna surveys will be undertaken by an SQP at key locations across the Project Area as determined by the Baseline Pest Flora and Fauna Report. Permanent monitoring sites are to be established following the baseline pest flora and fauna assessment and first year of treatment and should include locations of known infestations (treated and untreated), retained habitat with potential for pest flora resurgence, waterways and roads/tracks. Additional monitoring sites can be included based on observed additional infestations over the year. All monitoring sites are to be visited and assessed annually.

In addition to the permanent monitoring sites, opportunistic pest flora and fauna species data is to be collected as needed while travelling through the Project Area or inspecting

locations where potential new infestations have been reported. These opportunistic sightings will be inputted into the GIS platform.

The results of this annual monitoring round will be compiled in an Annual Pest Flora and Fauna Report, to be used to inform planning of upcoming year management practices as well as reviewing and updating the WPMP.

The Annual Pest Flora and Fauna Report must include the following information:

- Up-to-date list and mapping of pest flora and fauna infestation across the Project Area.
- Information on new pest flora and fauna species or new infestations recorded.
- Summary details on the pest flora and fauna treatment program undertaken, both historically and within the relevant year.
- Results on the pest flora and fauna monitoring and audit of treatment activities undertaken within the relevant year to assess effectiveness.
- Review and, if needed, re-evaluation of the pest flora and fauna species priority list for treatment within the Project Area.
- Analyses and trends of progress toward the set performance targets from the commencement of pest flora and fauna management activities.
- Recommendations for adjustments and updates to the WPMP and strategies to be implemented based on emerging trends or new treatment options.

The annual inspection and preparation of the Annual Pest Flora and Fauna Report will be undertaken by an independent SQP.

### **7.3 Data Collection**

Representative and standardised data is to be collected during all assessments, to allow for accurate representation of the infestations present within the Project Area, as well as analyses, comparison and trend identification over the years.

The data collected for each observation will include a combination of spatial values (location), attributes (pest flora and fauna data) and photographic evidence.

Spatially, the data will be collected as follows:

- Point data – where <10 plants were identified at a single location or where one instance/observation of a pest fauna species has been made.
- Linear data – where extended infestations occurred along tracks, creeks, buildings or more generally in linear form. In this instance, the attributes collected are applicable to 20 metres either side of the line, unless otherwise stated.
- Polygonal data – where infestations occurred across one or more areas.

#### **General Information**

For each data entry, the following information is to be recorded.

- Observer;
- Date;
- Time;
- Location;
- Conditions; and
- Characteristics.

### Flora

- Pest flora species name.
- Density of the infestation as a 1-5 numerical score based on the density classes presented in Table 7.1 and developed from the Spatial Pest Attribute (SPA) Standard (DAFF 2012).
- Observed health of the pest flora species (e.g. healthy, stressed, dead, regrowth).
- Whether it's flowering, fruiting or seeding.
- Whether it has been treated or not as part of the WPMP.
- General observations or comments.

### Pest fauna

- Pest fauna species name.
- Type of observation (e.g. visual, call, tracks, scat, etc).
- Number of individuals.
- Life stage or maturity (e.g. juvenile, adult).
- Behaviour (if observed).
- Observed/potential impact (e.g. grazing, predation, habitat degradation).
- General observations or comments.

**Table 7.1: Pest Flora Density Classed Based on DAFF 2012**

| Density Score | Density Class | Ground cover species - percent cover (%) | Shrubs and woody species - number of plants in a 10m x 10m plot |
|---------------|---------------|------------------------------------------|-----------------------------------------------------------------|
| 1             | Scattered     | 0-10                                     | 1-2                                                             |
| 2             | Low           | 11-20                                    | 3-4                                                             |
| 3             | Moderate      | 21-30                                    | 5-6                                                             |
| 4             | High          | 31-50                                    | 7-14                                                            |
| 5             | Very High     | 51-100                                   | >15                                                             |

Any pest flora or fauna species recorded during monitoring efforts or incidental sightings identified as a prohibited or restricted (category 1 or 2) matter must be reported to relevant personnel from the ECMPL Environmental Department immediately and prior to implementing any control measures.

## 8 PERFORMANCE INDICATORS

Specific performance indicators have been developed to track the progress of pest flora and fauna species and management actions implemented toward the achievement of the set targets across the life of the Project.

Annual monitoring and associated reporting will measure the progress to date against the set performance indicators and provide information to be used to review and update this WPMP, as part of the adaptive management framework.

The specific performance indicators relevant to the implementation of this WPMP and relevant targets to be achieved by the end of the Project life are presented in Table 8.1 and Table 8.2.

**Table 8.1: Performance Indicators and Measurable Targets – Pest Flora Species**

| Criterion / Category                                                                                       | Monitoring required                                                                                                                                                                                                                     | Target to be achieved                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No introduction of new pest flora species in the Project Area or further dispersal across the Project Area | All newly disturbed or cleared areas are inspected and monitored for onset of pest flora species infestations.                                                                                                                          | <ul style="list-style-type: none"> <li>No new pest flora species detected within the Project Area, with particular focus on those listed in Table 5.2.</li> </ul>                                                                      |
|                                                                                                            | All retained areas of natural habitat adjacent to construction activities are inspected and monitored for onset of pest flora species.                                                                                                  |                                                                                                                                                                                                                                        |
|                                                                                                            | All Project Area to be inspected for presence of pest flora species consistent with monitoring method identified in the WPMP.                                                                                                           |                                                                                                                                                                                                                                        |
|                                                                                                            | All equipment and gear is inspected and routinely cleaned to prevent pest flora species. All vehicles and mobile plants undergo strict wash-down procedures, particularly if transporting materials from infested areas to clean sites. | <ul style="list-style-type: none"> <li>No seeds or contaminated mud/soil material is present on vehicles, mobile plant, equipment or gear when moving across the Project Area.</li> </ul>                                              |
|                                                                                                            | Pest flora hygiene inspections to be completed by appropriately trained persons for all vehicles and mobile plants entering and operating within the Project Area.                                                                      | <ul style="list-style-type: none"> <li>Pest flora Hygiene Declaration Certificates to be produced for all vehicles and mobile plants and submitted to the Environmental Department</li> </ul>                                          |
|                                                                                                            | All groundworks material introduced to the Project to be free of pest flora species.                                                                                                                                                    | <ul style="list-style-type: none"> <li>No contaminated material to be brought within the Project Area.</li> <li>All material is Certified as being free of pest flora species prior to being brought into the Project Area.</li> </ul> |

| Criterion / Category                                                           | Monitoring required                                                                                                                                                                          | Target to be achieved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                | All new pest flora species identified are to be included in the WPMP.                                                                                                                        | <ul style="list-style-type: none"> <li>Updated pest flora species list in the WPMP</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                | All new pest flora species identified are to be adequately controlled.                                                                                                                       | <ul style="list-style-type: none"> <li>Control and where possible eradication of any new pest flora species infestations detected within the Project Area.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  |
| Management of existing pest flora species infestations within the Project Area | Existing pest flora species infestations to be managed and controlled across the Project Area.                                                                                               | <ul style="list-style-type: none"> <li>No increase in distribution or density of the pest flora species listed in Table 5.1 and addressed in Section 5.1.</li> <li>Achievement of &lt;10% pest flora species presence and density values for all species recorded within the Project Area.</li> <li>No WoNS or listed Category 3 Restricted Matter flora species present within the Project Area.</li> <li>No observed increase in infestations in natural areas (undisturbed by the Project) adjacent to the Project Area.</li> </ul> |
| General measures                                                               | The Biosecurity Management Procedure, which also considers Biosecurity Management Plans held by landowners grazing the Mining Leases under the Biosecurity Act, is successfully implemented. | <ul style="list-style-type: none"> <li>All objectives listed in the Biosecurity Management Procedure are met.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                | Construction and use of dedicated vehicle and machinery cleaning bay(s) established a minimum of 50 m from any watercourses.                                                                 | <ul style="list-style-type: none"> <li>No spill, flow or discharge of runoff from the vehicle cleaning bay(s) into the surrounding environment.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                                | Runoff from the vehicle cleaning bay(s) is contained and is treated with herbicide to control pest flora species that are washed off vehicles, mobile plant and equipment.                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Qualifications and Certifications                                              | All pest flora species management and control measures are undertaken by an SQP.                                                                                                             | <ul style="list-style-type: none"> <li>Records and evidence of relevant Qualifications and Certifications to be provided by all personnel involved in management activities.</li> </ul>                                                                                                                                                                                                                                                                                                                                                |

| Criterion / Category     | Monitoring required                                                                                                                                                                                                                                                            | Target to be achieved                                                                                                                                  |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitoring and Reporting | A baseline assessment of the presence, distribution, density, and associated ecological risk of pest flora species within the Project Area is to be completed at prior to the implementation of this WPMP (Year 0) to inform condition and assist works and progress tracking. | <ul style="list-style-type: none"> <li>• Production of a Baseline Pest Flora and Report.</li> </ul>                                                    |
|                          | Pest flora species monitoring is completed in accordance with the schedule and methodologies presented in Section 7 of this WPMP.                                                                                                                                              | <ul style="list-style-type: none"> <li>• No non-compliances observed.</li> </ul>                                                                       |
|                          | Maps, species lists and associated information are to be updated following scheduled monitoring events, or as needed pending opportunistic observations.                                                                                                                       | <ul style="list-style-type: none"> <li>• Production, updating and distribution of pest flora species maps and associated information.</li> </ul>       |
|                          | An Annual Pest Flora and Fauna Report is produced to present results and progress toward completion of the set objectives and trends over time.                                                                                                                                | <ul style="list-style-type: none"> <li>• Yearly production of an Annual Pest Flora and Fauna Report.</li> </ul>                                        |
|                          | Following issuance of the Annual Pest Flora and Fauna Report, the WPMP is reviewed and updated accordingly.                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Yearly review and updating (if required) of the WPMP.</li> </ul>                                              |
|                          | Hygiene Declarations / Reports / Certificates to be produced and recorded following each vehicle or mobile plant pest flora inspection.                                                                                                                                        | <ul style="list-style-type: none"> <li>• All hygiene Declarations / Reports / Certificates are digitally recorded.</li> </ul>                          |
|                          | Any Category 3 Restricted Matter or WoNS identified in the Project Area are reported in accordance with relevant protocols as outlined in this WPMP                                                                                                                            | <ul style="list-style-type: none"> <li>• Production, Reporting and archiving/lodgement of all Category 3 Restricted Matter or WoNS records.</li> </ul> |

**Table 8.2: Monitoring Indicators and Measurable Targets – Pest Fauna Species**

| Criterion                                                                                              | Monitoring Indicator                                                                                                                                                                                                             | Target to be achieved                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No introduction of pest fauna species in the Project Area beyond those identified in baseline surveys. | All newly disturbed or cleared areas are inspected and monitored for the onset of pest fauna species infestation.                                                                                                                | <ul style="list-style-type: none"> <li>No new pest fauna species detected within the Project Area</li> </ul>                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                        | Project Area to be inspected annually pest fauna species. Monitor changes in presence or distribution of pest fauna.                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                        | All equipment and gear is inspected and routinely cleaned to prevent pest spread. All vehicles and mobile plants undergo strict wash-down procedures, particularly if transporting materials from infested areas to clean sites. | <ul style="list-style-type: none"> <li>No potentially contaminated mud/soil material is present on vehicles, mobile plants, equipment or gear when moving across the Project.</li> </ul>                                                                                                                                                                                                                                                                       |
|                                                                                                        | All water and groundwork materials introduced to the Project to be free of pests or their eggs.                                                                                                                                  | <ul style="list-style-type: none"> <li>No pest-contaminated material to be brought within the Project.</li> <li>All material is certified as 'weed and disease free' prior to being brought within the Project.</li> </ul>                                                                                                                                                                                                                                     |
|                                                                                                        | All new pest species identified are to be included in the WPMP.                                                                                                                                                                  | <ul style="list-style-type: none"> <li>Updated pest list in the WPMP</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                        | All new pest species identified are to be adequately controlled.                                                                                                                                                                 | <ul style="list-style-type: none"> <li>Control and where possible eradication of any new pest infestations detected within the Project Area</li> </ul>                                                                                                                                                                                                                                                                                                         |
| Management of existing pest infestations within the Project                                            | Existing pest infestations to be managed and controlled across the Project. Implementation of Project-specific pest protocols.                                                                                                   | <ul style="list-style-type: none"> <li>No increase in population or distribution of the pest species listed in Table 5.3 and addressed in Section 0.</li> <li>No listed Category 3 Restricted Matter species present within the Project.</li> <li>No detected increase in pest presence or distribution across the Project.</li> <li>Production of logs and records with evidence of success of control measures implemented for each pest species.</li> </ul> |

| Criterion                         | Monitoring Indicator                                                                                                                                                                                                                                                        | Target to be achieved                                                                                                                                                                                      |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | Identification and mapping of pests during pre-clearing surveys and implementation of suitable control measures.                                                                                                                                                            | <ul style="list-style-type: none"> <li>Updated maps and records for pest present in the Project.</li> </ul>                                                                                                |
| General measures                  | All waste that might attract pest fauna species is contained and adequately disposed of.                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>No pest fauna species observed around recreational areas, waste containers or disposal facilities.</li> </ul>                                                       |
| Qualifications and Certifications | All management and control measures are undertaken by an SQP                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Records and evidence of relevant Qualifications and Certifications to be provided by all personnel involved in pest management activities.</li> </ul>               |
| Monitoring and Reporting          | A baseline assessment of the presence, distribution, density, and associated ecological risk of pest fauna species within the Project Area is to be completed prior to the implementation of this WPMP (Year 0) to inform condition and assist works and progress tracking. | <ul style="list-style-type: none"> <li>Production of a Baseline Pest Flora and Fauna Report.</li> </ul>                                                                                                    |
|                                   | Pest fauna species monitoring is completed in accordance with the schedule and methodologies presented in Section 7 of this WPMP.                                                                                                                                           | <ul style="list-style-type: none"> <li>No non-compliances observed.</li> </ul>                                                                                                                             |
|                                   | Production, updating and distribution of pest maps and associated information.                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Maps, species lists and associated information are to be updated following scheduled monitoring events, or as needed pending opportunistic observations.</li> </ul> |
|                                   | An Annual Pest Flora and Fauna Report is produced to present results and progress toward completion of the set objectives and trends over time.                                                                                                                             | <ul style="list-style-type: none"> <li>Yearly production of an Annual Pest Flora and Fauna Report for the Project.</li> </ul>                                                                              |
|                                   | Following the issuing of the Annual Pest Flora and Fauna Report, the WPMP is reviewed and updated accordingly.                                                                                                                                                              | <ul style="list-style-type: none"> <li>Yearly review and updating of the WPMP.</li> </ul>                                                                                                                  |

| Criterion | Monitoring Indicator                                                                                                                                              | Target to be achieved                                                                                                                              |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|           | Any Category 2 and 3 Restricted Matter identified in the Project Area are reported within the Annual Pest Flora and Fauna Report following the relevant protocols | <ul style="list-style-type: none"><li>• Management, reporting and archiving/lodgement of all Category 2 and 3 Restricted Matter records.</li></ul> |

## 9 CORRECTIVE ACTIONS

In the event that one or more of the performance targets has not been achieved, the correcting actions presented in Table 9.1 will be implemented.

**Table 9.1: Corrective Action Plan**

| Issue / Event                                                                                                                                     | Management trigger                                                                                                                                                                                                                                                                                      | Corrective response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Introduction of new pest flora or fauna species within the Project Area.                                                                          | <ul style="list-style-type: none"> <li>New pest flora species detected.</li> <li>New pest fauna species detected.</li> </ul>                                                                                                                                                                            | <ul style="list-style-type: none"> <li>Advise the relevant authorities (if required).</li> <li>ECMPL to undertake an investigation of the new infestation to confirm species, presence and extent.</li> <li>Consult with relevant personnel and an SQP to determine and address the cause of introduction of the species</li> <li>Investigate if suitable mitigation measures have been implemented as described in this WPMP or identify if the WPMP does not provide suitable actions.</li> <li>Implement treatment measures as needed to control / eradicate the new infestation</li> <li>Schedule and complete monthly monitoring for treatment success and progression toward eradication</li> <li>Improve hygiene practices including re-education of Project employees and contractors.</li> <li>Review and if required update the WPMP.</li> </ul> |
| Spread of existing on-site pest flora or fauna infestations<br>or<br>Existing on-site pest flora or fauna infestations impacting on natural areas | <ul style="list-style-type: none"> <li>New infestations of existing pest species.</li> <li>Increase in the density of existing pest species.</li> <li>Failure of treatment controls implemented.</li> <li>Detected impact on natural areas and areas of high ecological value, MNES or MSES.</li> </ul> | <ul style="list-style-type: none"> <li>Advise the relevant authorities (if required).</li> <li>ECMPL to undertake an investigation of the area impacted to confirm nature and extent of impact.</li> <li>Consult with relevant personnel and an SQP to determine and address the cause of impact.</li> <li>Investigate if suitable mitigation measures have been implemented as described in this WPMP or identify if the WPMP does not provide suitable actions.</li> <li>Identify and implement rehabilitation measure(s) as needed.</li> <li>Implement suitable and updated/alternative treatment measure(s) as needed.</li> <li>Schedule and complete monthly monitoring for progression toward impact reduction and rehabilitation.</li> <li>Review and if required update the WPMP.</li> </ul>                                                       |

| Issue / Event                  | Management trigger                                                                                                                                                                       | Corrective response                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Non-conformance with this WPMP | <ul style="list-style-type: none"> <li>• Incident reports submitted.</li> <li>• Non-compliances identified.</li> <li>• Complaints lodged by stakeholders or external parties.</li> </ul> | <ul style="list-style-type: none"> <li>• Personnel to notify the Environmental Department supervisor responsible for the area of non-compliance</li> <li>• ECMPL to undertake investigation of the non-compliance and provide the Environmental Department with clear instructions and resources to address and resolve the non-compliance.</li> <li>• ECMPL to check that the non-compliance is resolved within a time-frame commensurable to the severity of the non-compliance.</li> </ul> |

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**10 PERIODIC REVIEW AND UPDATING**

As part of the adaptive management framework, a review process of the WPMP will commence at the end of the first year of its implementation and continue on a yearly basis following the issuing of the Annual Pest Flora and Fauna Report throughout the life of the Project, unless otherwise defined as part of the Annual Pest Flora and Fauna Report.

Periodic reviews at this nominated timing will allow all relevant findings, results and corrective actions identified by each annual management and monitoring program to be integrated.

Updates to the WPMP following the outcome of the review process should include,:

- Whether performance targets specified in section 8 have been met (or are in the process of being met) and whether any corrective actions are triggered
- Pest flora and pest fauna species lists relevant for the Project, if new species have been detected.
- Priority for management of pest flora and fauna species, based on extent and severity of infestations assessed.
- Pest flora and fauna control measures, schedule and effort to be implemented, based on assessed outcomes and overall trends observed over time.

The WPMP may undergo additional reviews outside of the set schedule on an as-needed basis, particularly if any of the following occurs:

- In the event of a legislative breach, incident, or community complaint.
- Changes in legislative requirements or ECMPL internal policies.
- Changes in Project activities or Project Area.

## 11 ABBREVIATIONS

| Abbreviation    | Definition                                                           |
|-----------------|----------------------------------------------------------------------|
| ACDC            | Agricultural Chemicals Distribution Control                          |
| Biosecurity Act | <i>Biosecurity Act 2014</i>                                          |
| EA              | Environmental Authority                                              |
| ECMPL           | Eva Copper Mine Pty Ltd                                              |
| EPBC Act        | <i>Environment Protection and Biodiversity Conservation Act 1999</i> |
| GPS             | <i>Global Positioning System</i>                                     |
| Harmony         | Harmony Gold Mining Company Limited                                  |
| km              | Kilometres                                                           |
| LiDAR           | Light Detection and Ranging                                          |
| mg              | Milligrams                                                           |
| MNES            | Matters of National Environmental Significance                       |
| MSES            | Matters of State Environmental Significance                          |
| NC Act          | Nature Conservation Act 1992                                         |
| PPE             | PPE                                                                  |
| SQP             | Suitably Qualified Person                                            |
| WoNS            | Weeds of National Significance                                       |
| WPMP            | Weed and Pest Management Plan                                        |

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**ATTACHMENT A: RECOMMENDED SPECIES-SPECIFIC WEED TREATMENT  
METHODS**

## WEED AND PEST MANAGEMENT PLAN

| Scientific name             | Common name        | Biosecurity Act status | WoNS | Treatment method                                          | Treatment details and timing                                                               |
|-----------------------------|--------------------|------------------------|------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <i>Andropogon gayanus</i>   | Gamba Grass        | Category 3             | Yes  | Chemical control – Foliar spray                           | Late dry season                                                                            |
|                             |                    |                        |      | Physical control – Slashing or removal                    | All year round                                                                             |
| <i>Argemone ochroleuca</i>  | Mexican Poppy      | -                      | -    | Physical control – Slashing or removal                    | Prior to fruiting and seeding                                                              |
| <i>Calotropis gigantea</i>  | Caltrope           | -                      | -    | Chemical control – Foliar spray or cut stump + basal bark | All year round                                                                             |
| <i>Calotropis procera</i>   | Rubber Bush        | -                      | -    | Chemical control – Foliar spray or cut stump + basal bark | All year round                                                                             |
| <i>Carthamus lanatus</i>    | Saffron Thistle    | -                      | -    | Chemical control – Foliar spray                           | Prior to fruiting and seeding                                                              |
|                             |                    |                        |      | Physical control – Slashing or removal                    | Prior to fruiting and seeding                                                              |
| <i>Cleome viscosa</i>       | Asian Spiderflower | -                      | -    | Physical control - Hand pulling                           | All year round. Effective on small areas where follow-up is possible to control seedlings. |
|                             |                    |                        |      | Chemical control - Foliar spray                           | Based on the recommended timing of application for the selected herbicide type.            |
| <i>Convolvulus arvensis</i> | Common Bindweed    | -                      | -    | Physical control - Tillage and slashing                   | All year round                                                                             |
|                             |                    |                        |      | Chemical control - Foliar spray and cut and swab          | Spraying is most effective in Autumn                                                       |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name                      | Common name | Biosecurity Act status | WoNS | Treatment method                                                                                                                                                       | Treatment details and timing                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------|-------------|------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Cryptostegia grandiflora</i>      | Rubber vine | Category 3             | Yes  | Physical control - Repeated slashing close to ground level for scattered infestations                                                                                  | All year round                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                      |             |                        |      | Chemical control - Cut stump treatment and Foliar spray<br>Refer to Cabbage Tree Creek Diversion Rubber Vine Treatment Plan (EVAMP001-EVA-EN-PLA-0020) (Harmony 2026c) | Cut-stump treatment of mature rubber vine is less sensitive to short term rainfall and may proceed shortly after rainfall events.<br><br>Foliar application is more sensitive to weather conditions and must be undertaken when plants are actively growing with adequate leaf area present. Where practicable, foliar spraying should be scheduled within 24 to 48 hours following rainfall, when seedlings and juvenile plants are physiologically active. |
| <i>Cryptostegia madagascariensis</i> | Rubber Vine | Category 3             | -    | Physical control - Slashing                                                                                                                                            | All year round. Repeated slashing close to ground level for scattered infestations                                                                                                                                                                                                                                                                                                                                                                           |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name           | Common name  | Biosecurity Act status | WoNS | Treatment method                                        | Treatment details and timing                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|--------------|------------------------|------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           |              |                        |      | Chemical control - Cut stump treatment and Foliar spray | <p>Cut-stump treatment of mature rubber vine is less sensitive to short term rainfall and may proceed shortly after rainfall events.</p> <p>Foliar application is more sensitive to weather conditions and must be undertaken when plants are actively growing with adequate leaf area present. Where practicable, foliar spraying should be scheduled within 24 to 48 hours following rainfall, when seedlings and juvenile plants are physiologically active.</p> |
| <i>Cylindropuntia sp.</i> | Devil's Rope | Category 3             | -    | Physical control - Tillage and ploughing                | All year round                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                           |              |                        |      | Chemical control - Spray                                | Based on the recommended timing of application for the selected herbicide type.                                                                                                                                                                                                                                                                                                                                                                                     |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name              | Common name | Biosecurity Act status | WoNS | Treatment method                       | Treatment details and timing                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------|-------------|------------------------|------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              |             |                        |      | Biological control                     | Cochineal Insect ( <i>Dactylopius tomentosus</i> ) is most effective in drier warmer areas. It was introduced from the southern part of the United States in 1925 and 1926. It is effective but works slowly. Once established the insect will spread to new segments and adjacent plants. Cochineal Insect can also be spread manually by placing a few cochineal infected segments on unaffected plants (Land Protection 2006; Tanner 2007). |
| <i>Datura sp.</i>            | Thorn-apple | -                      | -    | Physical control - Slashing / grubbing | Any time of year, prior to flowering. Hand pull or cut off at ground level.                                                                                                                                                                                                                                                                                                                                                                    |
|                              |             |                        |      | Chemical control – Foliar spray        | Spraying is recommended when the datura is still young and growing—usually in spring or early summer.                                                                                                                                                                                                                                                                                                                                          |
| <i>Dichanthium annulatum</i> | Sheda Grass | -                      | -    | Chemical control – Foliar spray        | Based on the recommended timing of application for the selected herbicide type.                                                                                                                                                                                                                                                                                                                                                                |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name              | Common name            | Biosecurity Act status | WoNS | Treatment method                       | Treatment details and timing                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------|------------------------|------------------------|------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Echinochloa colona</i>    | Awnless Barnyard Grass | -                      | -    | Chemical control – Foliar spray        | Sequential application at different growth stages. Based on the recommended timing of application for the selected herbicide type.                                                                                                                                                                                                                                                                              |
| <i>Euphorbia hirta</i>       | -                      | -                      | -    | Physical control - Slashing / grubbing | Any time of year, prior to flowering. Hand pull or cut off at ground level.                                                                                                                                                                                                                                                                                                                                     |
|                              |                        |                        |      | Chemical control - Foliar spray        | Euphorbia should be sprayed early before it can set seed. Early wet season.<br><br>Repeated spraying may be required within the one growing season to prevent further seed production.<br><br>Timing of spraying is critical so that parthenium is removed when plants are small and before seeding has occurred. Grasses should be actively growing and seeding so that they can recolonise the infested area. |
| <i>Gynandropsis gynandra</i> | -                      | -                      | -    | Physical control - Slashing / grubbing | Any time of year, prior to flowering. Hand pull or cut off at ground level.                                                                                                                                                                                                                                                                                                                                     |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name              | Common name        | Biosecurity Act status | WoNS | Treatment method                               | Treatment details and timing                                                                                                |
|------------------------------|--------------------|------------------------|------|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                              |                    |                        |      | Chemical control - Foliar spray and Spot spray | Targeted foliar application on young, actively growing rosettes before they reach the flowering/seed stage.                 |
| <i>Jatropha gossypifolia</i> | Bellyache Bush     | Category 3             | Yes  | Physical control - Slashing / grubbing         | Any time of year, prior to flowering. Hand pull or cut off at ground level.                                                 |
|                              |                    |                        |      | Controlled burns - Fire                        | Effective in dense infestations where there is enough fuel to carry fire. Early dry season (May/June).                      |
|                              |                    |                        |      | Chemical control - Spraying                    | When actively growing, e.g. early wet season.                                                                               |
|                              |                    |                        |      | Chemical control - Cut stump application       | When actively growing. Cut stems to <100mm above ground level and immediately apply herbicide.                              |
| <i>Kalanchoe sp.</i>         | Mother of Millions | Category 3             | -    | Physical control - Hand pulling                | All year round, but preferably before flowering and seeding to prevent proliferation. Suitable only for small infestations. |
|                              |                    |                        |      | Controlled burns - Fire                        | Effective in dense infestations where there is enough fuel to carry fire. Early dry season (May/June).                      |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name       | Common name | Biosecurity Act status | WoNS | Treatment method                                                            | Treatment details and timing                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-------------|------------------------|------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |             |                        |      | Chemical control - Spraying                                                 | All year round, but most effective in the winter then the plants are in flower.                                                                                                                                                                                                                                                                                              |
| <i>Lantana camara</i> | Lantana     | Category 3             | Yes  | Physical control - Slashing                                                 | In riparian areas, physical control is the preferred method. Any time of year, preferably prior to seed set.                                                                                                                                                                                                                                                                 |
|                       |             |                        |      | Controlled burns - Fire                                                     | Regular burning with follow up spot spraying of regrowth (using an appropriate herbicide in riparian areas) can be effective. Early wet season.                                                                                                                                                                                                                              |
|                       |             |                        |      | Chemical control - Foliar spray, basal bark spraying, cut stump application | When actively growing and at time suitable for selected herbicide. Where access for mechanical control is not possible (e.g. due to steep banks or riparian fences), spray with handgun or knapsack using a non-residual herbicide registered for use near waterbodies. For low volume applications, use basal bark, cut stump, or splatter gun to reduce off-target damage. |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name                   | Common name        | Biosecurity Act status | WoNS | Treatment method                                              | Treatment details and timing                                                                                                |
|-----------------------------------|--------------------|------------------------|------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <i>Leucaena leucocephala</i>      | Leucaena           | -                      | -    | Chemical control - Basal bark spraying, cut stump application | All year round                                                                                                              |
| <i>Macroptilium atropurpureum</i> | Siratro            | -                      | -    | Physical control - Slashing / grubbing                        | Any time of year                                                                                                            |
|                                   |                    |                        |      | Chemical control - Foliar spray and Spot spray                | Based on the recommended timing of application for the selected herbicide type.                                             |
| <i>Malvastrum americanum</i>      | American fanpetals | -                      | -    | Physical control - Hand pulling                               | All year round, but preferably before flowering and seeding to prevent proliferation. Suitable only for small infestations. |
|                                   |                    |                        |      | Chemical control - Foliar spray and Spot spray                | Based on the recommended timing of application for the selected herbicide type.                                             |
| <i>Mesosphaerum suaveolens</i>    | Hyptis             | -                      | -    | Chemical control - Foliar spray and Spot spray                | Based on the recommended timing of application for the selected herbicide type.                                             |
|                                   |                    |                        |      | Physical control - Grazing                                    | Mintweed can be suppressed by maintaining vigorous perennial pastures (DPI NSW 2020)                                        |
| <i>Opuntia sp.</i>                | Prickly Pear       | Category 3             | Yes  | Chemical control - Foliar spray                               | All year round                                                                                                              |
|                                   |                    |                        |      | Physical control - Cutting                                    | All year round                                                                                                              |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name                 | Common name | Biosecurity Act status | WoNS | Treatment method                            | Treatment details and timing                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------|-------------|------------------------|------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Parkinsonia aculeata</i>     | Parkinsonia | Category 3             | Yes  | Chemical control - Cut stump treatment      | All year round                                                                                                                                                                                                                                                                                                                                                                                           |
| <i>Parthenium hysterophorus</i> | Parthenium  | Category 3             | Yes  | Chemical control - Foliar spray             | Parthenium should be sprayed early before it can set seed. Early wet season.<br>Repeated spraying may be required within the one growing season to prevent further seed production.<br>Timing of spraying is critical so that parthenium is removed when plants are small and before seeding has occurred. Grasses should be actively growing and seeding so that they can recolonise the infested area. |
| <i>Portulaca oleracea</i>       | Pigweed     | -                      | -    | Physical control – Tillage and hand pulling | Repeated tillage effective when feasible. Recommended early in weed lifecycle. Infrequent tillage can contribute to colonisation and spread.                                                                                                                                                                                                                                                             |
|                                 |             |                        |      | Chemical control - Foliar spray             | Most effective pre-emergence or early post-emergence. Potential for resistance to certain Group C herbicides.                                                                                                                                                                                                                                                                                            |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name            | Common name    | Biosecurity Act status | WoNS | Treatment method                                                                               | Treatment details and timing                                                                                                                    |
|----------------------------|----------------|------------------------|------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Prosopis glandulosa</i> | Honey Mesquite | -                      | -    | Chemical control - Basal bark spraying. cut stump application and foliar spray (for seedlings) | Based on the recommended timing of application for the selected herbicide type.                                                                 |
|                            |                |                        |      | Physical control - Grubbing and ploughing                                                      | All year round                                                                                                                                  |
|                            |                |                        |      | Controlled burns - Fire                                                                        | Regular burning with follow up spot spraying of regrowth (using an appropriate herbicide in riparian areas) can be effective. Early wet season. |
| <i>Prosopis pallida</i>    | Algarroba      | Category 3             | -    | Chemical control - Basal bark spraying. cut stump application                                  | During the growing season (approximately October to April, depending on species and location).                                                  |
|                            |                |                        |      | Physical control - Grubbing and ploughing                                                      | All year round                                                                                                                                  |
| <i>Prosopis velutina</i>   | Mesquite       | Category 3             | -    | Chemical control - Basal bark spraying. cut stump application                                  | During the growing season (approximately October to April, depending on species and location).                                                  |
|                            |                |                        |      | Physical control - Grubbing and ploughing                                                      | All year round                                                                                                                                  |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name          | Common name    | Biosecurity Act status | WoNS | Treatment method                               | Treatment details and timing                                                                                                                                                    |
|--------------------------|----------------|------------------------|------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Salvinia molesta</i>  | Salvinia       | Category 3             | Yes  | Chemical control - Foliar spray and spot spray | Based on the recommended timing of application for the selected herbicide type.                                                                                                 |
|                          |                |                        |      | Physical control - Hand pulling                | When the infestations are small                                                                                                                                                 |
| <i>Senna obtusifolia</i> | Sicklepod      | Category 3             | -    | Chemical control - Foliar spray and spot spray | Based on the recommended timing of application for the selected herbicide type.                                                                                                 |
|                          |                |                        |      | Physical control - Hand pulling and slashing   | All year round, but preferably when flowering                                                                                                                                   |
| <i>Sida acuta</i>        | Spinyhead Sida | -                      | -    | Physical control - Hand pulling and slashing   | All year round, but preferably before flowering and seeding to prevent proliferation. Manual removal by weeding under the surface of the ground, slashing using rotary cutters. |
|                          |                |                        |      | Chemical control - Foliar spray and Spot spray | Numerous herbicides are registered for the control of <i>Sida sp.</i> Based on the recommended timing of application for the selected herbicide type.                           |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name             | Common name  | Biosecurity Act status | WoNS | Treatment method                                                                               | Treatment details and timing                                                                                                                                                                                                           |
|-----------------------------|--------------|------------------------|------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Sida cordifolia</i>      | Flannel Weed | -                      | -    | Physical control - Hand pulling and Slashing                                                   | All year round, but preferably before flowering and seeding to prevent proliferation. Manual removal by weeding under the surface of the ground, slashing using rotary cutters.                                                        |
|                             |              |                        |      | Chemical control - Foliar spray and Spot spray                                                 | Numerous herbicides are registered for the control of <i>Sida sp.</i> Based on the recommended timing of application for the selected herbicide type.                                                                                  |
| <i>Tamarix aphylla</i>      | Athel Pine   | Category 3             | Yes  | Chemical control - Stem injection, cut stump application, basal bark spraying and foliar spray | Based on the recommended timing of application for the selected herbicide type.                                                                                                                                                        |
| <i>Vachellia farnesiana</i> | Mimosa Bush  | -                      | -    | Chemical control - Basal bark spray                                                            | Autumn and/or when actively growing. For stems up to 15cm in diameter, spray completely around base of plant to 30cm above ground level. Larger trees may be controlled by spraying to greater height, up to 100cm above ground level. |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name           | Common name    | Biosecurity Act status | WoNS | Treatment method                         | Treatment details and timing                                                                                                                                                                                                           |
|---------------------------|----------------|------------------------|------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           |                |                        |      | Chemical control - Cut stump application | When actively growing. Cut stumps horizontally as close to ground as possible and immediately swab cut surface with herbicide.                                                                                                         |
| <i>Vachellia nilotica</i> | Prickly Acacia | Category 3             | Yes  | Chemical control - Basal bark spray      | Autumn and/or when actively growing. For stems up to 15cm in diameter, spray completely around base of plant to 30cm above ground level. Larger trees may be controlled by spraying to greater height, up to 100cm above ground level. |
|                           |                |                        |      | Chemical control - Cut stump application | When actively growing. Cut stumps horizontally as close to ground as possible and immediately swab cut surface with herbicide.                                                                                                         |
| <i>Xanthium spinosum</i>  | Bathurst Burr  | -                      | -    | Physical control - Hand pulling          | Minor infestations can be effectively hand-pulled.                                                                                                                                                                                     |
|                           |                |                        |      | Chemical control - Foliar spray          | Spraying before flowering is effective (consult product label for appropriate herbicide and situations). Spray when actively growing.                                                                                                  |

## WEED AND PEST MANAGEMENT PLAN

| Scientific name            | Common name      | Biosecurity Act status | WoNS | Treatment method                                                                | Treatment details and timing                                                                                                          |
|----------------------------|------------------|------------------------|------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <i>Xanthium strumarium</i> | Californian Burr | -                      | -    | Physical control - Hand pulling                                                 | Minor infestations can be effectively hand-pulled.                                                                                    |
|                            |                  |                        |      | Chemical control - Foliar spray                                                 | Spraying before flowering is effective (consult product label for appropriate herbicide and situations). Spray when actively growing. |
| <i>Ziziphus mauritiana</i> | Chinee apple     | Category 3             | -    | Chemical control - Basal bark spraying, cut stump application, soil application | Treatment recommended in Autumn                                                                                                       |

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**ANNEXURE B – CANE TOAD MANAGEMENT AND MONITORING PLAN**



# **EVA COPPER MINE PROJECT**

## **CANE TOAD MANAGEMENT AND MONITORING PLAN**

**EVAMP001-EVA-EN-PLA-0030**

**DOCUMENT USERS** : ALL HARMONY  
**DEPARTMENT** : ENVIRONMENT  
**SUB-DEPARTMENT** : EVA COPPER MINE PROJECT  
**DOCUMENT OWNER** : ENVIRONMENT SUPERINTENDENT

| Revision | Prepared                  | Reviewed                 | Approved  | Date       | Description    |
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| 1        | EMM Consulting<br>Pty Ltd | J. Maunder               | S. Watson | 24/08/2026 | Issued for Use |

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## 1 INTRODUCTION

### 1.1 Background

The Eva Copper Mine Project (the Project) is a metalliferous mining operation owned and operated by Eva Copper Mine Pty Ltd (ECMPL), a wholly owned subsidiary of Harmony Gold Mining Company Limited (Harmony). The Project is situated in North-West Queensland, approximately 75 kilometres (km) north-west of Cloncurry and 95 km north-east of Mount Isa (Figure 1.1).

The Project is approved under the *Environmental Protection Act 1994* and operates in accordance with Environmental Authority (EA) EPML00899613 issued by the Department of the Environment Tourism, Science and Innovation (DETSI).

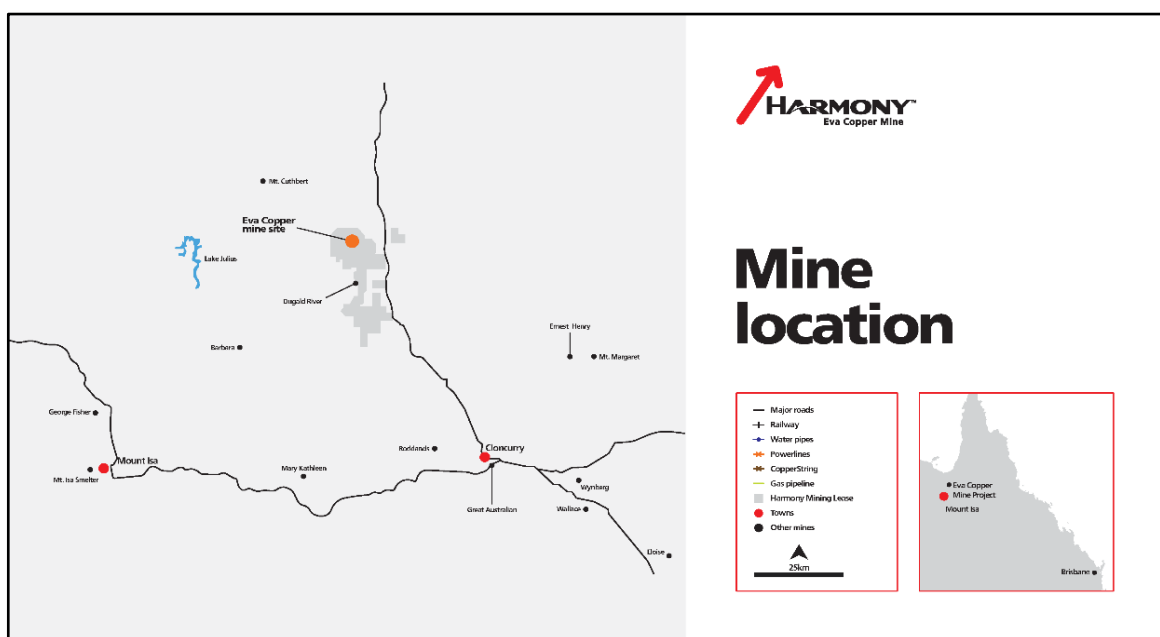


**Figure 1.1: Location of the Eva Copper Mine Project**

### 1.2 The Project

The Project comprises the extraction of 265 million tonnes (Mt) of sulphide and native copper ore using conventional drill and blast and truck and shovel mining methods. Mining will be undertaken across six mining areas being Little Eva, Blackard, Turkey Creek, Bedford, Lady Clayre and Scanlan. Little Eva and Blackard will provide (combined) 85% of the mining inventory for the Project.

The Project includes ancillary infrastructure comprising a Tailings Storage Facility, Waste Rock Dumps, Processing Plant, water production borefield, hybrid power plant setup and accommodation village.

The Project layout is shown in Figure 1.2.

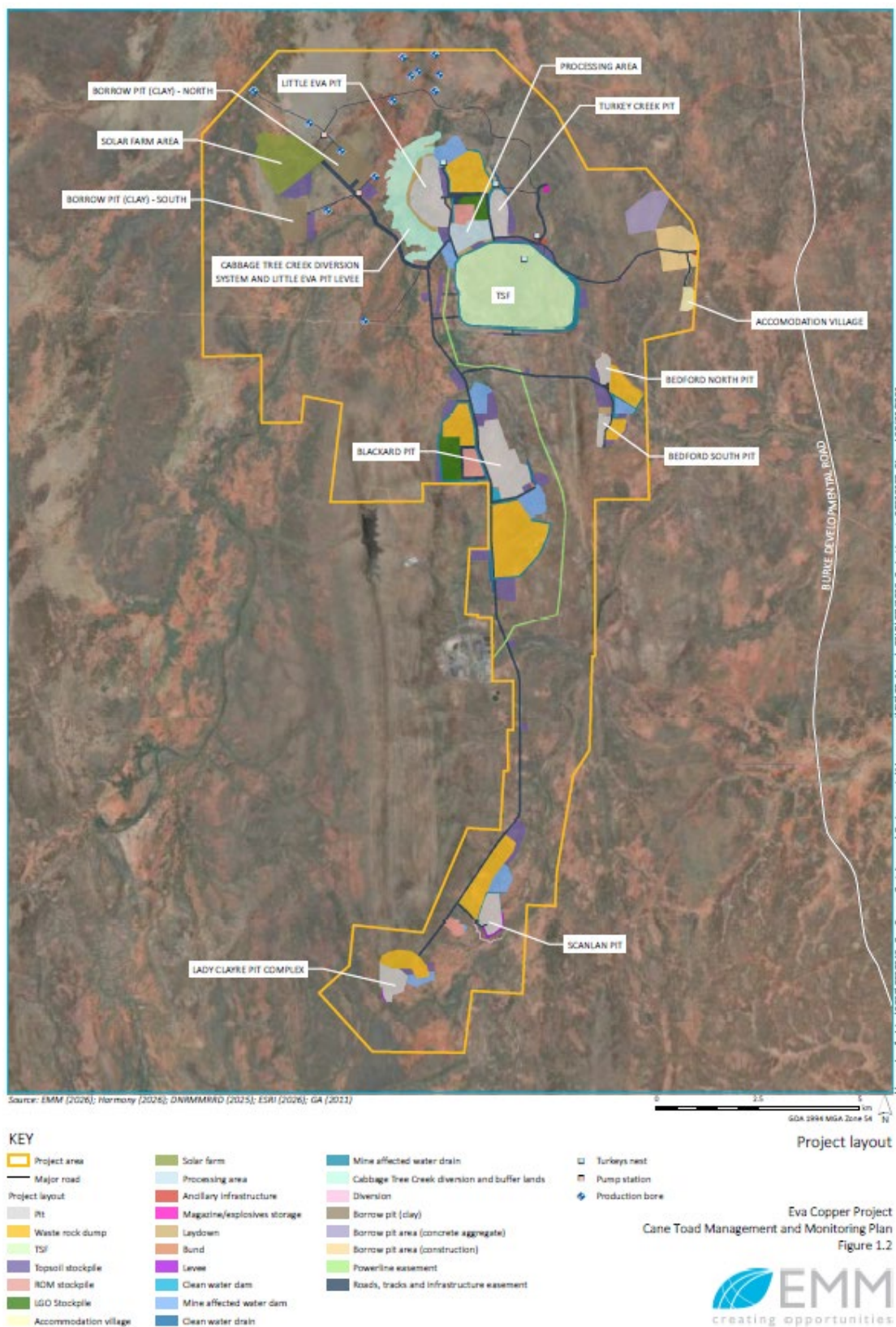


**Figure 1.2: Eva Copper Mine Project Layout**

### **1.3 Purpose**

Threatened fauna species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the *Nature Conservation Act 1992* (NC Act) have been confirmed within the Project Area. Of particular consideration to threats posed by Cane Toad are the Mertens' Water Monitor (*Varanus mertensi*), listed as Endangered under both the EPBC Act and NC Act, and the Northern Blue-tongued Skink (*Tiliqua scincoides intermedia*), listed as Critically Endangered under both the EPBC Act and NC Act.

Conservation Advice for both species identifies the highly invasive Cane Toad (*Rhinella marina*) as a key threatening process, due to the lethal toxicity experienced following ingestion (DCCEEW 2023; DCCEEW 2023a). The spread of Cane Toads across North Australia was a major factor contributing to the decline and subsequent listing of the Northern Blue-tongued Skink and continues to represent a significant threat to both species.

Given the confirmed occurrence of both these threatened species within the Project Area, this Cane Toad Management and Monitoring Plan has been developed to provide a framework for understanding, monitoring and managing the Cane Toad population and associated risks to native fauna, including Matters of National Environmental Significance (MNES) and Matters of State Environmental Significance (MSES) species.

### **1.4 Objectives**

The objectives of this Cane Toad Management and Monitoring Plan are to:

- Gain an understanding of Cane Toad distribution and population abundance across the Project Area and support appropriate management measures;
- Develop and implement targeted methodologies to mitigate and manage the Cane Toad population within the Project Area, particularly in areas where activities associated with the Project result in disturbance to native vegetation and waterways;
- Develop and implement a program of progressive monitoring and reporting to track Cane Toad population changes across the Project Area and assess effectiveness of control methodologies; and
- Reduce the risk posed to native fauna, including MNES and MSES through management of the Cane Toad population within the Project Area.

### **1.5 Background of Cane Toads and their ecological impact**

Since their introduction to Australia in 1935, Cane Toads have spread extensively and are now well established across northern Australia (HRSCEE 2019; DCCEEW 2021; Figure 1.3). Their rapid expansion has been driven by a high reproductive rate, environmental adaptability and a lack of predators; enabling them to thrive across a range of landscapes. As a result, Cane Toads have become a persistent and widespread ecological threat.

A key driver of their impact is their toxin, which is transferred to native fauna through ingestion (DSEWPC 2011). This poses a significant risk to predatory species, particularly carnivorous marsupials and reptiles, which are highly susceptible to poisoning. Consequently, the presence of Cane Toads within the Project Area poses a threat to both Mertens' Water Monitor and Northern Blue-tongued Skink due to the risk of lethal toxicity.

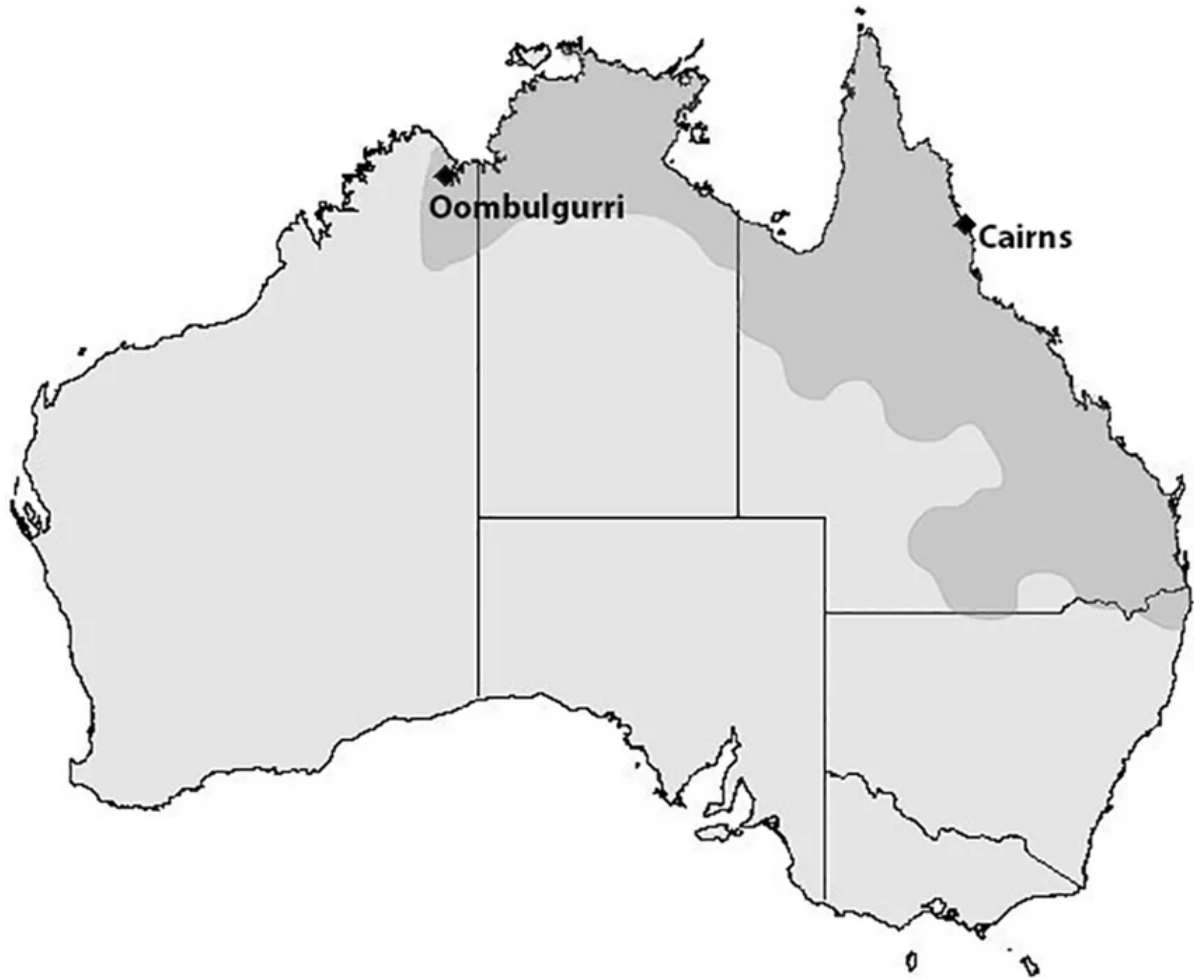


Figure 1.3: Map of Cane Toad distributions in 2017 (Selechnik et al 2017)

## 1.6 Relevance to Cane Toad Management – Mertens' Water Monitor

The Mertens' Water Monitor (*Varanus mertensi*) is known to occur within the Project Area, with records confirming its presence in habitats associated with waterways, and riparian corridors. According to the Conservation Advice, Cane Toads are recognised as the primary threat to the long-term persistence of Mertens' Water Monitor across northern Australia. Habitat critical to the survival of the species is defined as any area where the species persists concurrently with Cane Toads (DCCEEW 2023).

The species occupies habitats that are also highly suitable for Cane Toads, resulting in substantial overlap in habitat use. Mertens' Water Monitors are known to prey upon Cane Toads and are highly susceptible to their toxins, with ingestion frequently resulting in mortality. Population declines have been documented in many areas following Cane Toad establishment.

Mertens' Water Monitor habitat is mapped in Figure 1.4, there is 382 hectares (ha) of Critical Habitat and 298 ha of Habitat (Dispersal) within the Project Area. Given the known occurrence of Mertens' Water Monitor within the Project Area and the significant threat posed by Cane Toads, management actions are intended to improve understanding of

Cane Toad distribution and abundance, reduce the Cane Toad population, and minimise risks to the Mertens' Water Monitor population.

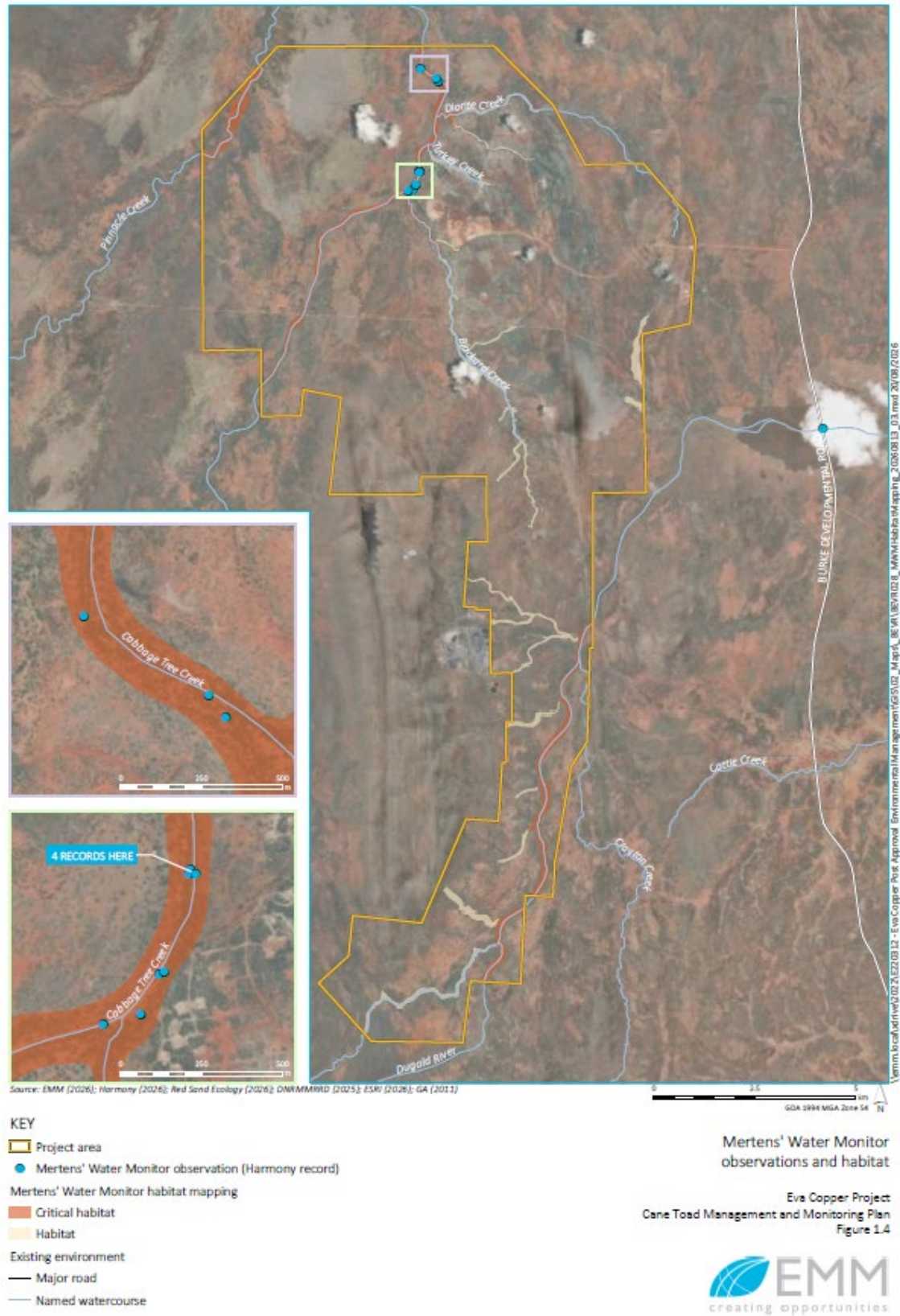


**Figure 1.4: Mertens' Water Monitor observations and habitat**

### 1.7 Relevance to Cane Toad Management – Northern Blue-tongued Skink

The Northern Blue-tongued Skink (*Tiliqua scincoides intermedia*) is known to occur within the Project Area, with suitable habitat present across parts of the Project Area. According to the Conservation Advice, Cane Toads are recognised as the key threatening process responsible for the decline of the Northern Blue-tongued Skink and were a major factor contributing to the subspecies being listed as Critically Endangered (DCCEEW 2023a). Cane Toads are Northern Blue-tongued Skinks are highly susceptible to fatal poisoning following attempts to prey upon Cane Toads. In addition, both species utilise cool, moist refuge habitats within otherwise hot and dry landscapes, increasing the likelihood of interaction and exposure to Cane Toads.

Northern Blue-tongued Skink habitat is mapped in Figure 1.5, there is 1,917 ha of Critical Habitat and 12,211 ha Habitat (Dispersal), mapped within the Project Area. Given the conservation significance of the Northern Blue-tongued Skink and its known occurrence within the Project Area, implementation of this Plan is intended to improve understanding of the Cane Toad population, reduce Cane Toad abundance where practicable, and minimise risks to Northern Blue-tongued Skink and other susceptible native fauna that may be affected by Cane Toads.

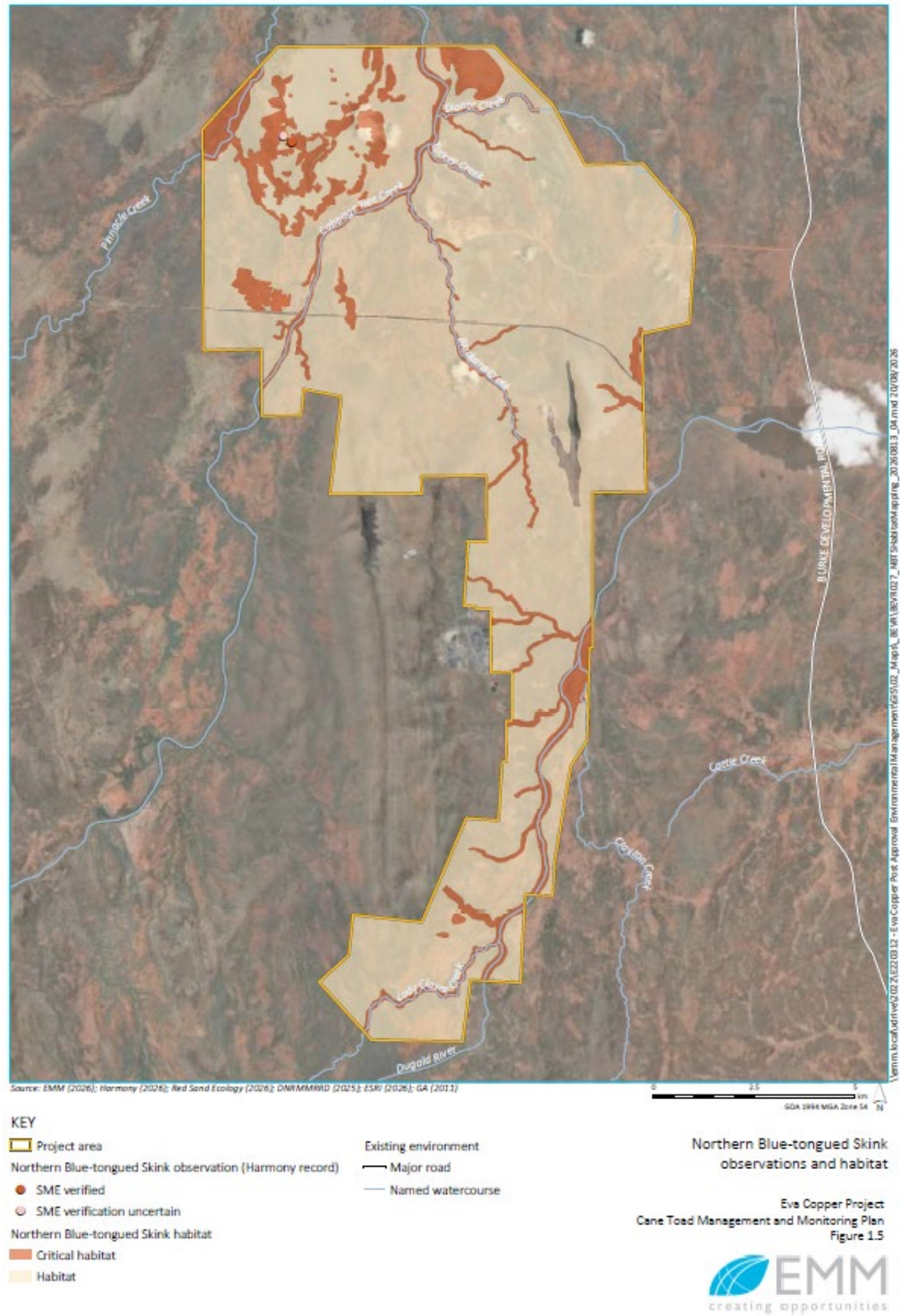


**Figure 1.5: Northern Blue-tongued Skink observations and habitat**

## **1.8 Current Understanding of Cane Toad Presence**

Cane Toads are known to occur within the Project Area based on incidental observations by field personnel and targeted monitoring undertaken in 2026. Preliminary surveys confirmed the presence of Cane Toads across multiple locations, including areas that overlap with known and potential habitat for Mertens' Water Monitor and Northern Blue-tongued Skink.

While these surveys provided a preliminary understanding of Cane Toad distribution within the Project Area, they were undertaken on the fringe of post-wet period, and the single survey effort does not form part of the baseline dataset. The completed transects and Cane Toad abundance of each transect is shown on Figure 1.6. Accordingly, this Plan includes a monitoring program to improve understanding of Cane Toad distribution and abundance over time and to inform the implementation and evaluation of management actions.

## **1.9 Risk of Cane Toad Infestation**

Construction activities and associated land disturbance such as vegetation clearing and earthworks may increase habitat suitability for Cane Toads within the Project Area by creating areas of exposed or sparsely vegetated ground that facilitates movement, sheltering, and potential breeding. These conditions may be exacerbated by natural seasonal events, particularly wet season rainfall and flooding resulting in ponding. These events will continue to drive Cane Toad establishment and spread within the Project Area and surrounding areas unless actively managed.

As Cane Toads are a key threatening process for the Mertens' Water Monitor and the Northern Blue-tongued Skink, ongoing management is required for the life of the Project to prevent an increase in Cane Toad population density and their expansion into previously unoccupied areas within the Project Area. If either of the indicators are unable to be met, corrective actions outlined in Section 5 will be actioned.

Regional expansion of Cane Toad occupancy cannot be prevented with any large-scale control methods (DPI 2025). Targeted control measures can however be implemented within the Project Area to reduce Cane Toad abundance and minimise potential impacts to nearby habitat values, including areas supporting critical habitat for MNES and MSES.

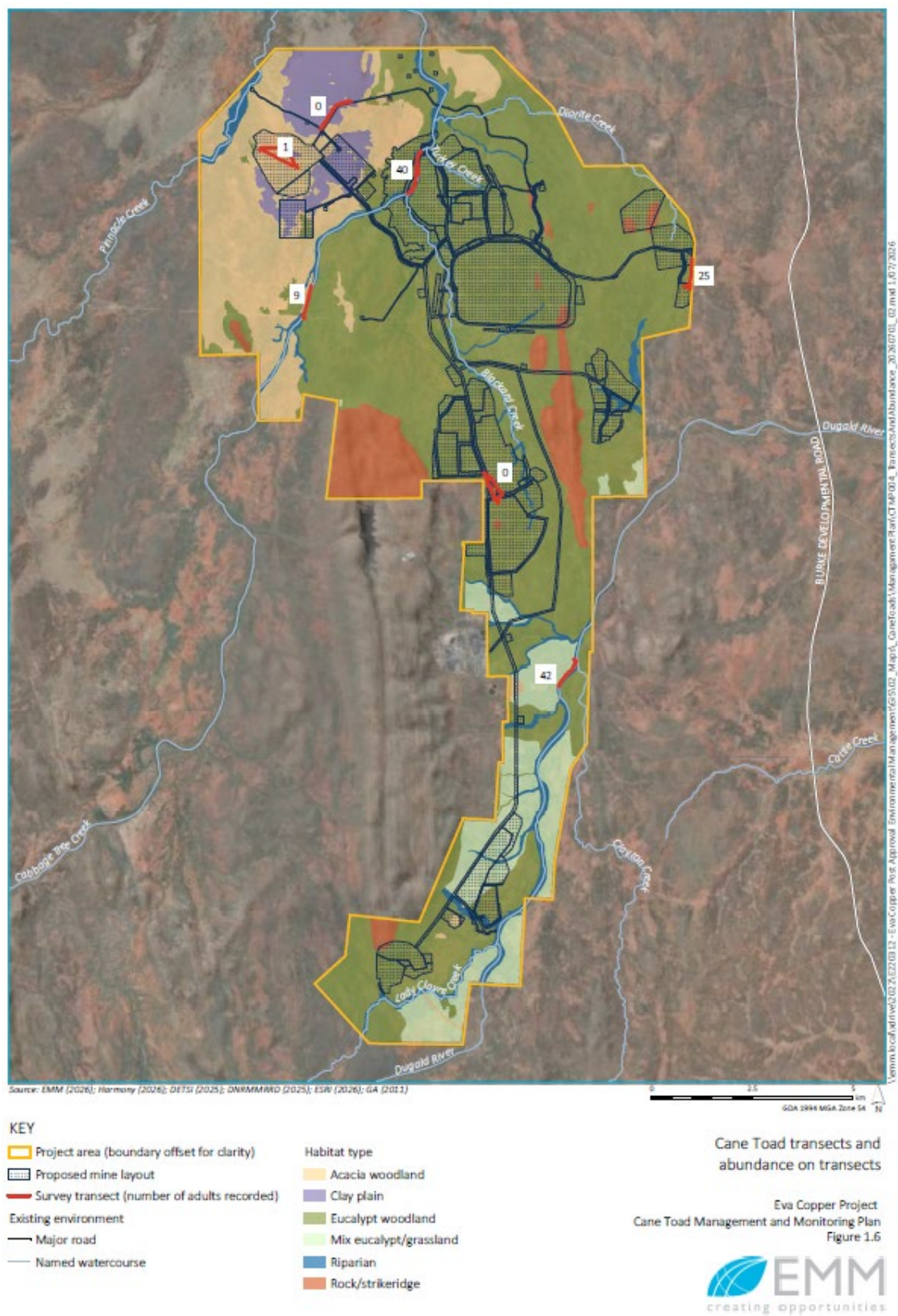


Figure 1.6: Cane Toad transects and abundance on transects

## **2 MONITORING**

Targeted Cane Toad surveys will be undertaken throughout the life of the Project to collect population data that enables consistent monitoring and therefore comparability over the lifetime of the Project. Surveys will document Cane Toad relative abundance, distribution and occupancy. Consistent replication of the survey methodology outlined below will enable assessment of changes in the Cane Toad population, including any changes associated with Project activities, and will help evaluate the effectiveness of mitigation and management measures.

Cane Toad population data will be used to assess trends in abundance over time, particularly where Project related disturbance creates suitable habitat features such as unvegetated ground or permanent water sources. These conditions and seasonal rainfall and flooding may facilitate Cane Toad movement or breeding and increase the risk to Mertens' Water Monitor and Northern Blue-tongued Skink. Ongoing Cane Toad monitoring informing management actions will therefore be implemented for the duration of the Project.

### **2.1 Methodology**

No specific State or Federal survey guidelines are available for monitoring Cane Toads. While it is acknowledged that Cane Toads are an invasive species, the *Survey guidelines for Australia's threatened frogs* (DEWHA 2010) has been consulted as it outlines general amphibian survey techniques which are applicable for Cane Toad.

#### **2.1.1 Visual encounter survey**

Visual Encounter Surveys (VES) will be conducted to assess Cane Toad occurrence and population density within the Project Area. Cane Toad population density will be calculated using the total number of adult individuals only. This number will represent the established population. All juvenile toads, tadpoles and eggs are to be removed from the environment however will not be used for population density calculations as there is a natural high mortality amongst Cane Toads at juvenile life stages. Population density will be recorded and expressed as the number of individuals per kilometre of VES transect, providing a relative population density.

##### **Survey implementation**

The VES will involve two (2) observers walking along a defined transect, searching for Cane Toads (DEWHA 2010). Cane Toads, juvenile toads, eggs and tadpoles will be collected and humanely euthanised during the surveys. Each Cane Toad detected (at any life stage) must be removed from the environment, humanely euthanised and disposed of in accordance with sections 2.1.3 and 2.1.4. Records must be taken of the number of clusters of eggs and tadpoles and juvenile toads removed from the environment. Where feasible, VES transects are to be walked from the creek bed to maximise coverage in suitable Cane Toad habitat.

The transect locations will be finalised during the initial round of the 2026/2027 wet season monitoring campaign and will be replicated in all future monitoring events. Eleven (11) preliminary VES transects are shown in Figure 2.1. It is important that transect locations are selected with consideration of seasonal changes in site access to ensure repeatability of monitoring. Following the initial round of Cane Toad monitoring, this management plan will be updated to reflect precise transect locations and Table 2.1 will be updated with the length of each transect. VES surveys will be repeated at these same transects over different seasonal intervals.

VES will be conducted along a central transect line. The two (2) observers will walk parallel to the transect, maintaining approximately 10 metres (m) between each other, with each observer surveying 5 m either side of their path, resulting in a total survey width of 20 m. Data collection will be confined to the 20 m transect width and Cane Toads observed outside this area do not need to be recorded.

Transects have been selected to be representative of different habitat types and locations across the Project Area (Figure 2.1). Cane Toads prefer habitat close to water with little vegetation (Mayer et al 2015), therefore, three (3) VES will be conducted in riparian habitat along fixed walking transects established along major waterways within the Project Area, including Cabbage Tree Creek and Dugald River. Two (2) transects will also be located within riparian habitat along smaller tributaries, including Blackard Creek and Lady Clayre Creek. Three (3) transects will be located in black soil plains and eucalypt/acacia woodlands to sample other habitat types that occur within the Project Area as control sites. One (1) transect will be established within the Accommodation Village to capture the potential effects of disturbance on Cane Toad occupancy. Some transects will be located in areas planned for disturbance so that changes in Cane Toad numbers over time can be measured. Two (2) areas considered high risk for Cane Toad infestation are the Cabbage Tree Creek diversion and the Blackard Creek diversion. Both diverted channels will be monitored using the same methodology pre-construction and post-construction to assess any changes in the Cane Toad population along artificial waterways.

Each transect should be a minimum of 1 km (Table 2.1). This design enables comparison between disturbed and undisturbed areas, with transects outside the impact footprint acting as a control.

Cane Toad behaviour is highly predictable, with activity mostly occurring at nighttime when individuals congregate around water sources (Greenlees et al 2020). To ensure optimal Cane Toad monitoring, surveys must be completed at least one (1) hour after sunset using a spotlight.

Information to be collected during each VES transect includes:

- Record start and end GPS coordinates and track transect on a GPS.
- Photograph start/end points.
- Date, start time and end time of transect.
- Observers walking the transect.
- Weather conditions including temperature, wind, humidity, level of water pooling (i.e. number of puddles) and rainfall on day of survey.
- Details of any recent construction or clearing activities occurring in the area.
- All observed individuals, including life stage: eggs, tadpoles, juvenile and adult.

Recommended equipment includes a large bucket with a hole in the lid per person, kitchen / rubber gloves and nets for capturing tadpoles / eggs. Attachment A includes a data sheet to be filled in for each VES transect.

**Table 2.1: VES Transect Locations**

| Transect Number | Locality           | Within impact footprint | Habitat type  |
|-----------------|--------------------|-------------------------|---------------|
| T01             | Cabbage Tree Creek | Yes                     | Riparian area |
| T02             | Cabbage Tree Creek | No                      | Riparian area |

| <b>Transect Number</b> | <b>Locality</b>               | <b>Within impact footprint</b> | <b>Habitat type</b>              |
|------------------------|-------------------------------|--------------------------------|----------------------------------|
| T03                    | Dugald River                  | No                             | Riparian area                    |
| T04                    | Solar Farm                    | Yes                            | Eucalypt/Acacia woodland         |
| T05                    | South of Sunwater Pipeline    | No                             | Eucalypt woodland                |
| T06                    | Northernmost black soil plain | No                             | Black soil plain                 |
| T07                    | Cabbage Tree Creek diversion  | Yes                            | Riparian area                    |
| T08                    | Blackard Creek diversion      | Yes                            | Riparian area                    |
| T09                    | Accommodation village         | Partial                        | Eucalypt woodland / cleared area |
| T10                    | Blackard Creek                | Partial                        | Riparian area                    |
| T11 <sup>1</sup>       | Lady Clayre Creek             | No                             | Riparian area                    |

<sup>1</sup> Subject to suitable and safe access.

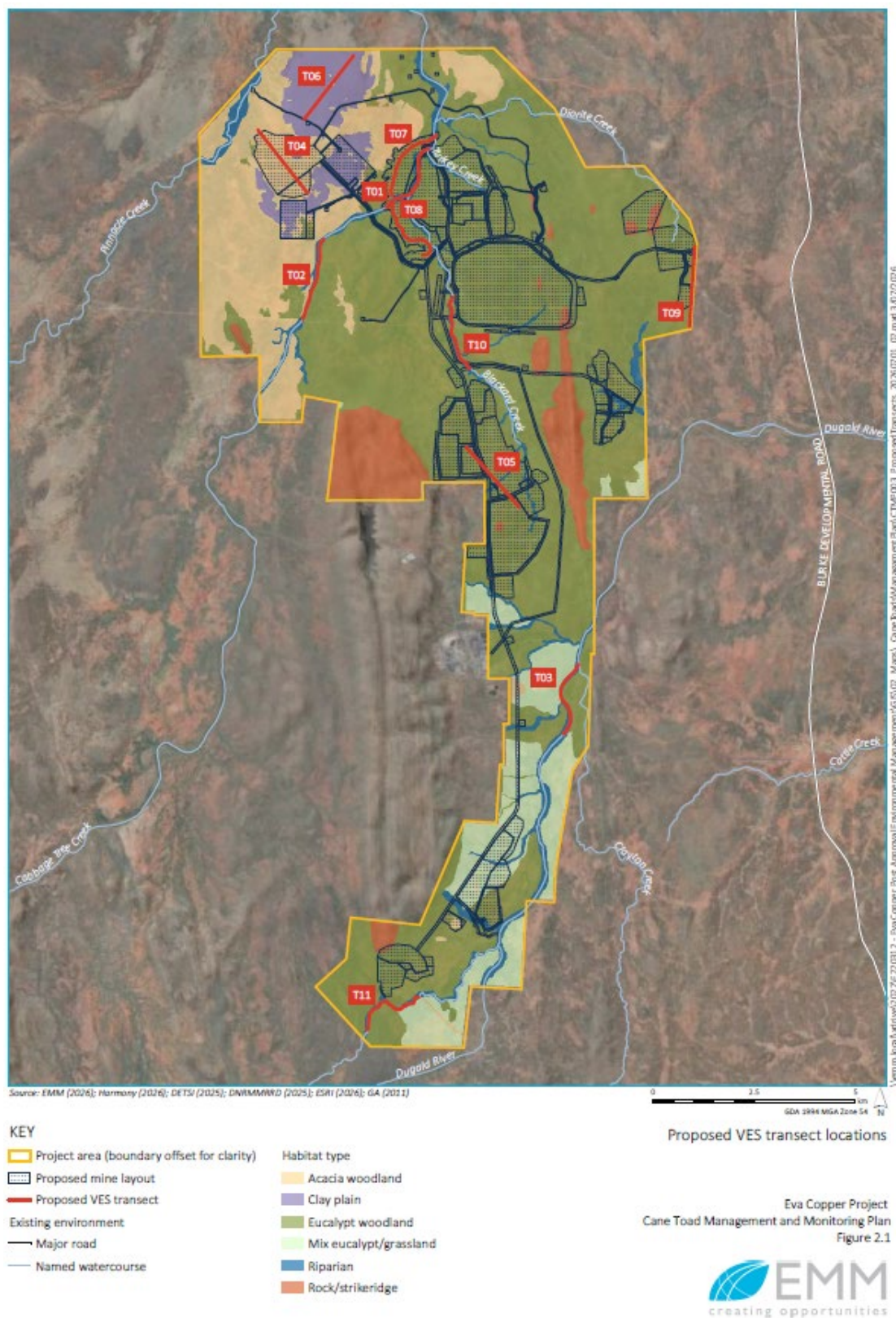


**Figure 2.1: Proposed VES Transect Locations**

## **Timing**

The Cane Toad breeding cycle is strongly associated with wet conditions. The Project Area remains predominantly dry for most of the year, with limited opportunities for water pooling outside the wet season.

Cane Toad surveys were undertaken in May 2026 to provide a preliminary understanding of Cane Toad presence and abundance. These surveys are not considered representative baseline monitoring, as they were not undertaken in full accordance with the Cane Toad VES methodology, and present only a single data point at the end of the 2025/26 wet season.

Cane Toad monitoring will commence at the beginning of the 2026/2027 wet season and continue at monthly intervals through to the end of the wet season. Monitoring will comprise of survey events conducted monthly from November to May. Each survey event will consist of all transects being surveyed by a team of two (2) observers over a maximum of four (4) consecutive nights. A total of six (6) survey events will be completed annually. Survey events will be subject to site access and conditions.

Consideration should be given to the level of construction and clearing completed prior to baseline monitoring. Several work fronts associated with the Project have commenced, with some areas already exposed to a high level of disturbance. As a result, baseline data will be collected following clearing and construction in some areas. The location and nature of any works completed prior to baseline monitoring will be documented in the first monitoring report.

As Cane Toad activity is typically reduced during cooler and drier periods, monitoring results will be reviewed after the first two (2) survey years to determine whether survey frequency should be adjusted without compromising data quality. To account for temporal variability associated with rainfall patterns and seasonal conditions, the results of individual survey events will be averaged across each wet season for analysis and reporting purposes.

### **2.1.2 Cane Toad Identification**

The correct identification of Cane Toads is fundamental in eliminating potential misidentification and subsequently harming native amphibians. To ensure that individuals are identified correctly, all observers involved with Cane Toad monitoring must be familiar with Cane Toad identification across all life stages, including adult, juvenile, tadpole and egg.

#### **Adult stage**

Adult Cane Toads can be differentiated from native frog species in Australia, however, it can be difficult without adequate training. Adult Cane Toads will have all the following body characteristics:

- Bony ridges above the eyes forming an 'M' shape.
- Horizontal pupil.
- Visible ear drum.
- Large poison (parotoid) gland behind the ear drum.
- Warty skin.
- Inward facing front feet, unwebbed.
- Semi-webbed toes on rear feet.
- Mottled belly.

Aside from visual identification, adult Cane Toads also have a distinct call. All observers involved with Cane Toad monitoring should familiarise themselves with Cane Toad calls to aid in identification.

### **Juvenile stage**

Cane Toads share morphological similarities with native frog species throughout their juvenile growth stage. Juvenile Cane Toads can be distinguished by a bony eyebrow ridge in the shape of the letter 'M', a paratoid gland behind the eardrum and small orange spots on the body (see Plate 2.1). The colour of Cane Toads varies significantly across the juvenile stage and is not sufficient to confirm identification.

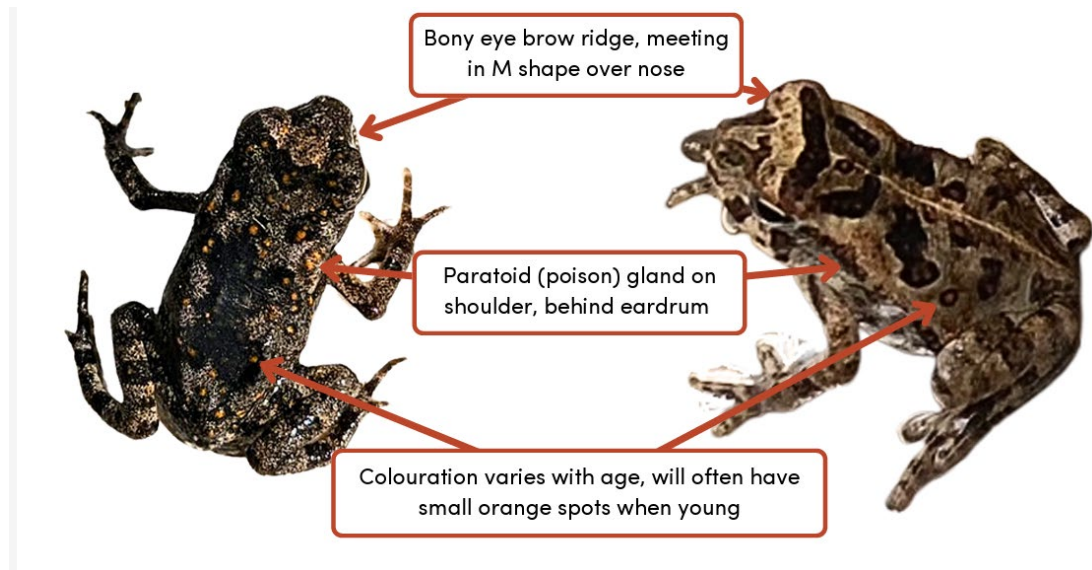


**Plate 2.1: Cane Toad juvenile identification (Watergum 2026)**

### **Tadpole stage**

Cane Toads are the only species in Australia that has a pure black tadpole. Native frogs have lighter coloured undersides with a range of colours and markings (see Plate 2.2).



**Plate 2.2: Cane Toad tadpole identification (Anstis 2013)**

## Egg stage

Native species of frog typically lay clusters of eggs, often appearing as a foamy mass. Cane Toads lay eggs in slow-moving or still water, and their eggs are easily distinguished as long, gelatinous strings often attached to water plants or debris (see Plate 2.3).



**Plate 2.3: Cane Toad egg identification (Watergum 2026)**

### 2.1.3 Safe handling and euthanasia

Cane Toads must be handled carefully to prevent accidental transfer of their toxin to observers. It is recommended to use a long-handled net and disposable gloves when undertaking Cane Toad removal.

In accordance with contemporary ethical standards aligned with Australia's Royal Society for the Prevention of Cruelty to Animals (RSPCA), the best way to euthanise Cane Toads while minimising harm to individuals is the refrigeration followed by freezing technique (Shine et al 2015; Jacobson 2017; Greenlees et al 2020; RSPCA 2024). This involves placing live Cane Toads in a fridge for 12 hours anaesthetising individuals, which is then immediately followed by placing the Cane Toads in a freezer for 24 hours to painlessly inflict death (Shine et al 2015; RSPCA 2024).

Cane Toads should be temporarily held in a large bucket with a hole in the lid, which is considered best practice for containment during surveys. Adult Cane Toads must be euthanised individually, while tadpoles and eggs can be done in groups.

### 2.1.4 Disposal

Care should be taken to ensure euthanised individuals are disposed of appropriately. Cane Toad carcasses remain toxic after death and can still pose a threat to native fauna (Shine 2010). Toxins are present in all Cane Toad life stages. Once death has been confirmed, all euthanised individuals must be placed in waste bins that are fitted with lids and disposed in accordance with the Project's waste management program. No carcasses can be left in the environment where native animals are exposed to them.

### **3 MITIGATION**

To minimise habitat suitability for Cane Toads within the Project Area, mitigation measures will be implemented. Mitigation will be applied in disturbed areas prior to and during construction and operation across the Project Area. Target areas will include areas where activities associated with the Project result in disturbance to native vegetation and waterways.

#### **3.1 Mitigation Through Design**

The design of clearing and construction areas throughout the Project Area should aim to deter Cane Toads by reducing favourable habitat and features that often occur in construction areas. Where possible, earth-moving machinery should contour ground surfaces to avoid shallow depression and divots that have the potential to hold water. Maintaining rapid drainage and preventing small, persistent pools from forming will minimise moist habitat conditions that Cane Toads favour.

Areas most vulnerable to Cane Toad infestation are the Cabbage Tree Creek and Blackard Creek diversion channels. Management and rehabilitation of disturbed areas must commence as soon as practicable following clearing and be closely monitored to ensure rapid establishment of vegetation and habitat structure that reduces the likelihood of Cane Toads exploiting open or disturbed ground.

#### **3.2 Waterbody Management**

All waterbodies (particularly artificial waterbodies) must be appropriately managed during construction and operation to reduce Cane Toad occupancy. Temporary waterbodies made for/during construction must be treated as high-risk and managed through regular drainage or drying cycles. The use of mesh screens or covers on water storage tanks and sumps, combined with timely dewatering or backfilling of excavations that capture water after rainfall will assist in reducing potential habitat.

Permanent water infrastructure such as water holding dams, sediment ponds and drains should be designed where possible to avoid forming low-flow, shallow-edged basins that can function as Cane Toad breeding hotspots.

Early ground cover using coarse substrates and woody debris in newly constructed diversion channels can reduce habitat suitability for Cane Toads, and will therefore reduce sheltering and breeding opportunities.

## **4 MANAGEMENT**

The Project Area will be actively managed to control Cane Toads and minimise harm of Cane Toads to native species. A focus of management is to implement tailored programs that will reduce threatening processes associated with Cane Toads while simultaneously improving habitat quality for native fauna, including MNES and MSES species.

In Queensland, the control of Cane Toads is not enforced as there is currently no available effective broad scale control methods (DPI 2025). However, under the *Biosecurity Act 2014* there is a General Biosecurity Obligation to undertake reasonable and practical measures to minimise biosecurity risks associated with invasive animals.

At the scale of the Project Area, Cane Toad management methods outlined below will be used to minimise as much as possible any increase in Cane Toad numbers or their further spread. The appropriate management method to be applied may vary under environmental conditions and the life form of the Cane Toads observed. It is up to the discretion of the observer to assess the situation and implement the most appropriate management method.

### **4.1 Management frequency and target areas**

Cane Toad management should be undertaken over three (3) days immediately after each monitoring event described in Section 2, resulting in six (6) management events per year. The management methods are outlined in Section 4.3, and the effort required for each event is provided in Table 4.1. Data including coordinates and a measure of success must be recorded each time a management method is implemented.

Aligning management measure implementation with wet season monitoring will help identify priority areas with higher Cane Toad abundance. Priority locations for management will be established based on monitoring results, recent observations and areas identified as high-risk. Success rates of the first round of management will also inform future management priority areas. Management should also target high-risk areas, including the Cabbage Tree Creek and Blackard Creek diversions, Project buildings and structures such as storage areas, washdown areas, ablution blocks, culverts and road grates, as well as any areas where Cane Toads have been recently recorded.

All captured Cane Toads must be humanely euthanised and disposed of in accordance with Section 2.1.3 and 2.1.4 of the Cane Toad Management Plan.

### **4.2 Education and Staff training**

All site personnel and contractors involved in Cane Toad survey and management must receive mandatory Cane Toad awareness training to ensure that correct identification, handling and euthanasia is applied. All observers completing Cane Toad management must be able to distinguish Cane Toads from native frogs. Biosecurity measures should be implemented to prevent accidental transport of Cane Toads to and from site.

During the wet season Cane Toad observations will be discussed at daily prestart meetings to ensure observations are communicated and response can be actioned accordingly. Any Cane Toad observations outside of known areas or within high-risk areas need to be notified to the environment department within 24 hours of observation.

### 4.3 Management methods

#### 4.3.1 Tadpole Trapping in Waterbodies

Cane Toad tadpole trapping is a method that can be implemented using the Watergum tadpole traps (Watergum n.d), see Plate 4.1. This method is reliable and can remove large numbers of Cane Toad tadpoles when traps are assembled, installed and monitored following the manufacturer's recommendations.

To avoid wasting resources and time, traps should only be used following an observation of Cane Toad tadpoles in a waterbody. Traps should be deployed within 48 hours of detection to ensure tadpoles are trapped before undergoing metamorphosis. Traps need to be set in stagnant or slow-moving waterways to be most effective.

Trapping involves partially submerging each trap within a suitable waterbody to a depth that allows tadpoles to enter. Once positioned, the lure should be placed inside the trap and the trap can be secured using sticks, rocks, or other stable materials. Traps should remain in situ for a minimum of four (4) hours and a maximum of eight (8) hours. At the end of the trapping period, the trap is to be removed from the waterbody and inspected on site. Any non-target fauna accidentally captured must be promptly identified and returned to the waterbody immediately to minimise stress or injury.

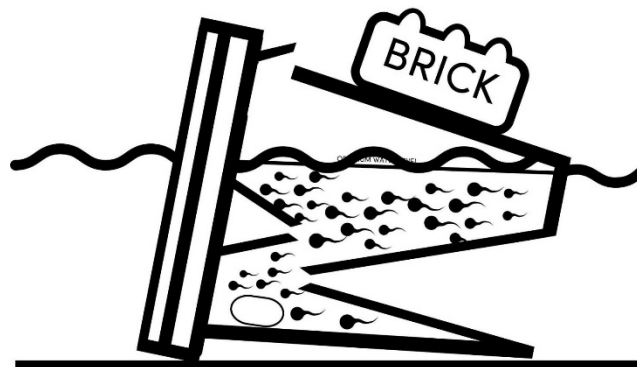


**Plate 4.1: Watergum tadpole traps (Watergum n.d)**

#### 4.3.2 Egg and tadpole removal with net

Eggs and tadpoles observed within a waterbody too small for the Watergum trap may be removed using a dip net. This technique is particularly effective in shallow pools where traps cannot be deployed. The small size of the shallow pool and thus restricted movement of tadpoles will assist with the capture using a net.

#### 4.3.3 Physical trapping

Adult Cane Toads can be removed using the Toadinator traps (Animal Control Technologies n.d) in any area where adult Cane Toads are present, see Plate 4.2. These traps are designed using a UV light and acoustic calls to selectively lure Cane Toads while avoiding capture of native frogs. Traps should be placed in any areas where there is increased Cane Toad activity or habitat suitability, such as near water bodies and drainage lines. Set traps must be checked the following morning, and any non-target fauna accidentally captured must be promptly released.



**Plate 4.2: Toadinator traps (Animal Control Technologies n.d)**

#### **4.3.4 Toad Busting**

Toad busting involves a group effort during nighttime and is aimed at manually removing Cane Toads from the environment. Toad busting will be most effective under wet season conditions when Cane Toad activity and detectability is highest. Toad busting involves collecting adult Cane Toads using a net and a large tub or bag.

Artificial lighting can be strategically used to lure Cane Toads into a location to allow for quick capture of multiple individuals in a short period of time. Toad Busting is most effective when completed at regular intervals and can substantially reduce local Cane Toad numbers (Greenlees et al 2020).

**Table 4.1: Management event effort**

| Management method                | Brief description                                              | Effort                                                                                                                                         |
|----------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Tadpole trapping in waterbodies  | Use of Watergum traps with lure in suitable waterbody          | Deploy one trap per location where Cane Toad tadpoles have been recently sighted (in accordance with user guidelines) for 3-day total duration |
| Egg and tadpole removal with net | Manual removal of Cane Toad tadpoles and eggs using a hand net | 3-day duration at opportunistic intervals                                                                                                      |

| Management method | Brief description                  | Effort                                                                                                                                 |
|-------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Physical trapping | Use of Toadinator trap             | Deploy one trap per location where Cane Toads have been recently sighted (in accordance with user guidelines) for 3-day total duration |
| Toad busting      | Manual removal of adult Cane Toads | 3-day duration at opportunistic intervals                                                                                              |

## 5 CORRECTIVE ACTIONS

Monitoring and management practices are designed to track population changes and to prevent further increases in the Cane Toad population. Management practices will aim to reduce numbers in the Cane Toad population and their expansion across the Project Area. If either indicator outlined in Table 5.1 is met, the corresponding corrective actions will be initiated.

**Table 5.1: Corrective action plan**

| Indicator                                   | Corrective action trigger                                                                                                                                                | Corrective actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| An increase in Cane Toad population density | A threshold of an increase of $\geq 15\%$ over a wet season of monitoring will be used to assess an increase in population density relative to baseline monitoring data. | <p>Consult with relevant personnel and SQP to determine and address the cause of Cane Toad population density increase.</p> <p>Investigate if suitable management and mitigation measures have been implemented as described in this Cane Toad Management and Monitoring Plan.</p> <p>Assess waterbodies to determine if modification to prevent breeding of Cane Toads is required.</p> <p>Increase frequency of Cane Toad management events throughout the wet season.</p> <p>Increase the duration of Cane Toad management events.</p> <p>An investigation into Cane Toad management will be undertaken, and the findings will be documented in a report. Any new technologies or control methods should be investigated.</p> <p>Update the Cane Toad Management and Monitoring Plan and training/awareness/information modules as needed.</p> |

| Indicator                                                                  | Corrective action trigger                                                               | Corrective actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cane Toads expand into previously unoccupied areas within the Project Area | Any new occurrence of Cane Toads on transects that were previously absent of Cane Toads | <p>Consult with relevant personnel and SQP to determine and address the cause of Cane Toad expansion.</p> <p>Investigate if suitable mitigation measures have been implemented as described in this Cane Toad Management and Monitoring Plan.</p> <p>Increase frequency of Cane Toad management events throughout the wet season.</p> <p>Increase the duration of Cane Toad management events.</p> <p>An investigation into Cane Toad management will be undertaken, and the findings will be documented in a report. Any new technologies or control methods should be investigated.</p> <p>Update the Cane Toad Management and Monitoring Plan and training/awareness/information modules as needed.</p> |

A threshold of 15% will be used for assessing an increase in Cane Toad population density. A 15% increase has been selected as the threshold because it is large enough to distinguish a genuine population increase from normal survey variability, whilst also allowing for early intervention before the population size grows dramatically. Population increases below 15% may represent natural fluctuations or sampling errors.

Population density increases and expansion into previously unoccupied areas will be assessed annually for each wet season and compared against baseline data established during the 2026/2027 monitoring campaign.

Population reduction targets will be assessed at the timing intervals specified in Table 5.2, which sets out the population targets relative to baseline monitoring data.

**Table 5.2: Population reduction targets**

| Timing                | Reduction target                               |
|-----------------------|------------------------------------------------|
| By the end of Year 3  | ≥2% reduction from baseline population density |
| By the end of Year 5  | ≥4% reduction from baseline population density |
| By the end of Year 10 | ≥6% reduction from baseline population density |
| By the end of Year 15 | ≥8% reduction from baseline population density |

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| Timing                              | Reduction target                                |
|-------------------------------------|-------------------------------------------------|
| By the end of mine life (~Year 17)) | ≥10% reduction from baseline population density |

Corrective actions outcomes will be assessed annually included with annual reporting. Adaptive management and strategies will be developed as required.

## **6 REPORTING**

An initial baseline Cane Toad monitoring report will be prepared following completion of baseline surveys during the 2026/2027 wet season. This report will establish baseline population densities to be measured against.

Subsequent annual reports will evaluate the effectiveness of Cane Toad management actions and assess population density in the Project Area. These reports will be prepared at the conclusion of each wet season (i.e. by 30 June).

All Cane Toad monitoring and management data must be collected and uploaded to a spatial database. This database will support Cane Toad occurrence mapping which will inform management decisions.

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**7 ABBREVIATIONS**

| Abbreviation | Definition                                                      |
|--------------|-----------------------------------------------------------------|
| ECMPL        | Eva Copper Mine Pty Ltd                                         |
| EPBC Act     | Environment Protection and Biodiversity Conservation Act 1999   |
| DCCEEW       | Department of Climate Change, Energy, the Environment and Water |
| DPI          | Department of Primary Industries                                |
| NC Act       | Queensland Nature Conservation Act 1992                         |
| MNES         | Matters of National Environmental Significance                  |
| RSPCA        | Royal Society for the Prevention of Cruelty to Animals          |
| VES          | Visual encounter survey                                         |

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**ATTACHMENT A – CANE TOAD MONITORING DATA SHEET**

## Cane Toad Monitoring Data Sheet

Date: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

Start Coordinates:

\_\_\_\_\_

End Coordinates:

\_\_\_\_\_

Photo taken at start: ☐ Yes ☐ No

Photo taken at end: ☐ Yes ☐ No

Observer 1:

\_\_\_\_\_

Observer 2:

\_\_\_\_\_

Temperature (°C): \_\_\_\_\_

Wind (km/h): \_\_\_\_\_

Humidity (%): \_\_\_\_\_

Rain since 9am (mm): \_\_\_\_\_

Ground condition: ☐ Wet ☐ Dry

Construction within 2 km: ☐ Yes ☐ No

If yes, notes on construction:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Observations

Adults

Detected: ☐ Yes ☐ No

Number of Individuals: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Juveniles

Detected: ☐ Yes ☐ No

Number of Individuals: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tadpoles

Detected: ☐ Yes ☐ No

Approx. Number: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Eggs

Detected: ☐ Yes ☐ No

Number of Strings: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_