2024-2025 MALLEEFOWL MONITORING

Covalent Lithium

ecoscape

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SUMMARY

Ecoscape was engaged by Covalent Lithium to provide the following services as part of the annual fauna monitoring:

- undertake National Malleefowl Recovery Team Malleefowl mound monitoring for the 2024-25 monitoring season
- collate images of fauna species and activity from Malleefowl mounds
- comply with the monitoring requirements outlined in the *Earl Grey Lithium Project Terrestrial Fauna Environmental Management Plan* as required under Ministerial Statement 1199.

The results of the Malleefowl mound monitoring and review of the recorded images provides ongoing data that can be used for temporal comparisons of Malleefowl activity for the Covalent Earl Grey Lithium Project (EGLP) site.

The 2024-25 Malleefowl monitoring program recorded information on mounds which are monitored on an annual and 5-year basis. In total there were five mounds that recorded signs of Malleefowl breeding activity during the 2024-25 monitoring period, and one mound with a single visitation (MM58). An activity analysis determined that there are five distinct breeding pairs in the monitoring area. All five active mounds (MM62, MM70, MM77, MM82, and MM101) were part of the annual monitoring recommendation and two of these (MM62 and MM70) were active during the previous monitoring period (2023-24). Overall, during the 2024-25 monitoring period, Malleefowl activity within the monitored area has increased by 40% when compared with the 2023-24 monitoring period.

The 2024-25 monitoring period recorded one active breeding mound within the Development Envelope (DE) and four active breeding mounds outside the DE. As per the trigger and threshold criteria, which were formulated to address Condition 3-1(2) of MS 1199 which states "*No direct or indirect adverse impacts to Malleefowl and Chuditch within the Development Envelope"*, the activity of one breeding pair within the DE has been maintained since 2020.

In January 2025, the Skeleton Rock Bushfire impacted over 37,136hectares (ha) of vegetation. A total of 30.9% (576.3 ha) of the DE was burnt and 94.9% (2004.8 ha) of the Life of Mine (LOM) survey area (proposed DE) was burnt. The fire burnt three active and 74 inactive mounds. Of the five known 2024-25 breeding pairs, three have been recorded on cameras post-fire. The fire also destroyed 13 trail cameras, resulting in a significant loss of data.

Trail cameras deployed at mounds identified eight different Malleefowl mounds that were visited by Feral Cats, one by Wild Dogs/Dingos, and one that was visited by a Fox. This included both active and inactive Malleefowl mounds.

To provide Malleefowl population health and abundance data, the following are recommended to be monitored annually:

- trail camera monitoring during the egg incubation season (October to February) of all Malleefowl mounds that have been identified as annual, within and adjacent to the DE
- maintain a database of Malleefowl and other fauna species sightings within a fauna register and report annually on number and location of active mounds
- collate image data and report on status of all monitored mounds
- collate and report on records of sightings of feral predators captured on cameras at the monitored mounds
- continue opportunistic ground truthing of LiDAR data within the DE.
- It is also recommended that the 2025-26 monitoring should also include the identification of mounds in the 'local' (5 km) area that are showing signs of activity from breeding pairs that have potentially been displaced by the fire.

ACRONYMS AND ABBREVIATIONS

Table 1: Acronyms and abbreviations

Acronyms	
BC Act	Western Australian *Biodiversity Conservation Act 2016*
BoM	Bureau of Meteorology
Covalent	Covalent Lithium Pty Ltd, Mt Holland site
DAWE	Commonwealth Department of Agriculture, Water and Environment (2020-2022, now DCCEEW)
DBCA	Western Australian Department of Biodiversity, Conservation and Attractions
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
DE	Development Envelope
DEC	Western Australian Department of Environment and Conservation (2006-2013, now DBCA)
DEWHA	Commonwealth Department of the Environment, Water, Heritage and the Arts (2007-2010, now DCCEEW)
DFES	Department of Fire and Emergency Services
Ecoscape	Ecoscape (Australia) Pty Ltd
EGLP	Earl Grey Lithium Project, Mt Holland site
EP Act	Western Australian *Environmental Protection Act 1986*
EPA	Western Australian Environmental Protection Authority
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
EZ	Malleefowl Mound Exclusion Zone
ha	Hectare
IBRA	Interim Biogeographic Regionalisation for Australia
km	Kilometres
LOM	Life of Mine survey area
NMRT	National Malleefowl Recovery Team
MNES	Matters of National Environmental Significance
MS	Ministerial Statement
TFEMP	Terrestrial Fauna Environmental Management Plan
VU	Vulnerable (listed under Commonwealth EPBC Act and/or Western Australian BC Act)

1 INTRODUCTION

1.1 BACKGROUND

Covalent Lithium Pty Ltd (Covalent) is developing the Earl Grey Lithium Project (EGLP) located at Mt Holland in Western Australia which includes the construction and operation of a fully integrated mine, concentrator and refinery. The project is centred on the Earl Grey hard-rock lithium deposit 105 km south of Southern Cross and approximately 500 km east of Perth. It is owned by a 50-50 joint venture (JV) between subsidiaries of Wesfarmers Pty Ltd (WES:ASX) and Sociedad Química y Minera de Chile S.A. (SQM: NYSE). Covalent is the manager for the JV and is responsible for the development and operation of the project.

The survey area includes the habitats of two conservation-listed fauna species: Malleefowl (*Leipoa ocellata*) and Chuditch (*Dasyurus geoffroii*). Both species are listed as Vulnerable (VU) under both the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and the Western Australian *Biodiversity Conservation Act 2016* and are considered as Matters of National Environmental Significance (MNES).

Monitoring of Malleefowl mounds was undertaken during the mound building and egg laying summer season in 2024-2025. Mounds identified for annual monitoring were revisited and remeasured. Trail cameras were deployed on mounds to capture activity of Malleefowl and other fauna species, including feral predators.

A large bushfire, known as the Skeleton Rock Fire, burnt over 100,000 ha during January 2025, including an approximately 576.3 ha within Covalent's Development Envelope (DE).

1.2 PROJECT SCOPE

Ecoscape was engaged to conduct the annual monitoring survey of known Malleefowl mounds. The requirements of the field survey were to:

- undertake annual population monitoring of Malleefowl mounds in accordance with the Terrestrial Fauna Environmental Management Plan (TFEMP), as required by Ministerial Statement (MS) 1199
- be conducted in accordance with current statutory and technical requirements and guidance
- be undertaken by suitably qualified, experienced personnel in compliance with regulatory expectations
- identify, map and measure Malleefowl mounds to National Malleefowl Recovery Team (NMRT) standards
- install and deploy trail cameras on mounds.

1.3 SURVEY AREA

1.3.1 REGIONAL LOCATION

The survey area is in the Shire of Yilgarn in the Goldfields region of Western Australia, approximately 105 km south of Southern Cross. The DE is within the Great Western Woodlands (GWW) and is approximately 1,984 ha in extent (**Map 1**). The GWW is a 16 million ha area extending from the wheatbelt to the edge of the deserts and is the largest intact area of Mediterranean Woodland on earth (Department of Environment and Conservation (DEC) 2010). The GWW includes open Eucalypt woodlands (63%), Mallee Eucalypt woodlands, shrublands and grasslands. Less common habitats in the GWW include granite outcrops, banded ironstone formations, salt lakes and freshwater wetlands (Fox et al 2016).

The DE is in the Southern Cross Subregion of the Coolgardie Bioregion of the Interim Biogeographic Regionalism for Australia (IBRA) classification system (Department of Agriculture Water and the Environment (DAWE) 2020). The dominant land-uses in this bioregion are Crown Reserves and Unallocated Crown Land (66.7%), grazing on native pastures (17%), conservation (11.5%) and dryland agriculture (2.3%) (Cowan et al 2001). The greenstone hills, alluvial valleys and broad plains of calcareous earths support diverse Eucalypt woodlands. The uplands support Mallee woodlands and scrub-heaths on sandplains, gravelly sandplains and lateritic breakaways, chains of salt lakes with dwarf shrublands of Samphire occur in the valleys(ibid 2001).

1.4 COMPLIANCE

This environmental assessment was conducted in accordance with Commonwealth and State legislation and guidelines:

- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Western Australian *Environmental Protection Act 1986* (EP Act)
- Western Australian *Biodiversity Conservation Act 2016* (BC Act)
- Department of Environment Water Heritage and the Arts *Matters of National Environmental Significance. Significant impact guidelines 1.1 - Environment Protection and Biodiversity Conservation Act 1999* (DEWHA 2009).

In addition, the Minister for the Environment has published lists of fauna species in need of special protection because they are considered rare, likely to become extinct, or are presumed extinct. The current listings were published in the Government Gazette on 1 July 2025 (Western Australian Government 2025)and was taken into account.

As well as those listed above, the assessment complied with Environmental Protection Authority (EPA) requirements for environmental survey and reporting in Western Australia, as outlined in *Technical Guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA 2020).

1.4.1 COMMONWEALTH ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

At a Commonwealth level, threatened taxa (flora and fauna) are protected under the EPBC Act, which lists species that are considered Critically Endangered, Endangered, Vulnerable, Conservation Dependant, Extinct, or Extinct in the Wild.

1.4.2 WESTERN AUSTRALIAN ENVIRONMENTAL PROTECTION ACT 1986

The Western Australian EP Act was created to provide for an EPA that has the responsibility for:

- prevention, control and abatement of pollution and environmental harm
- conservation, preservation, protection, enhancement, and management of the environment
- matters incidental to or connected with the above.

The EPA is responsible for providing the guidance and policy under which environmental assessments are conducted. It conducts environmental impact assessments (based on the information included in environmental assessments and provided by the proponent), initiates measures to protect the environment and provides advice to the Minister responsible for environmental matters.

1.4.3 WESTERN AUSTRALIAN BIODIVERSITY CONSERVATION ACT 2016

The Western Australian BC Act provides for the conservation, protection and ecologically sustainable use of biodiversity and biodiversity components in Western Australia. It commenced on 1 January 2019.

Threatened species (both flora and fauna) and ecological communities that meet the categories listed within the BC Act are highly protected and require authorisation by the Minister to take or disturb. These are known as Threatened Flora, Threatened Fauna and Threatened Ecological Communities. The conservation categories of Critically Endangered, Endangered and Vulnerable have been aligned with those detailed in the EPBC Act.

Flora and fauna species may be listed as being of special conservation interest if they have a naturally low population, restricted natural range, are subject to or recovering from a significant population decline or reduction of range or are of special interest, and the Minister considers that taking may result in depletion of the species. Migratory species and those subject to international agreements are also listed under the Act. These are known as specially protected species in the BC Act.

The most recent flora and fauna listings were published in the Government Gazette on 1 July 2025 (Western Australian Government 2025)

1.4.4 WESTERN AUSTRALIAN PRIORITY FAUNA

Conservation significant fauna species are listed by the DBCA as Priority Fauna where populations are geographically restricted or threatened by local processes, or where there is insufficient information to formally assign them to threatened fauna categories. Whilst Priority Fauna are not specifically listed in the BC Act, these have a greater level of significance than other native species.

1.4.5 DBCA WILDLIFE LICENCES

The field survey for the 2024 Malleefowl monitoring program was undertaken by Ecoscape Senior Ecologist Louisa Carlsson and Environmental Scientist Tracy de Vetter under DBCA Wildlife Licensing Fauna License No. BA27000085-4 and Threatened Fauna Authority TFA 2020-0070-2.

1.4.6 COVALENT LITHIUM ENVIRONMENTAL APPROVALS

Annual population monitoring of Malleefowl is required by Covalent's EGLP approval conditions as outlined in MS 1199 and more detailed in the EGLP TFEMP (Covalent 2022).

MS 1199 relating to Malleefowl are as follows:

- Condition 3-1 (1): no direct or indirect impacts to Malleefowl mounds within the Exclusion Zone (EZ refers to a 100 m buffer around known Malleefowl mounds)
- Condition 3-1 (2): no direct or indirect adverse impacts to Malleefowl and Chuditch within the DE
  - trigger criteria: a 25% decrease in the estimated local population number (based on temporal analysis) over a consecutive two-year period
  - threshold criteria: a project related 50% decrease in the estimated local population (based on temporal analysis of results from trail camera and mound status monitoring) over a consecutive two-year period
- Condition 3-1 (3): no removal of active Malleefowl mounds within the DE
- Condition 3-1 (4): minimise proposal-related direct or adverse indirect impacts to Malleefowl from feral animals within the DE.

2 METHODS

The 2024-25 Malleefowl monitoring was undertaken by Louisa Carlsson and Tracy de Vetter between 1-7 October 2024. This is the sixth consecutive season of monitoring which commenced in the mound building season of 2019-2020.

2.1 MALLEEFOWL MONITORING

All Malleefowl mounds known at Covalent (annual and 5 year) were revisited, re-measured and assessed to determine their current activity status. Each mound was recorded as either active or inactive and given a mound profile. **An active mound is described as one where mound building, egg laying and/or chick emergence is recorded**. Mounds were marked with a numbered star picket, photographed and cross sticks were left in place over the mound for future monitoring events. A 20 m radius was searched around active mounds only for any signs of predation.

At each Malleefowl mound, a series of criteria were recorded in accordance with section three of the NMRT Monitoring Manual (NMRT 2022). These criteria were:

- individual site and mound reference
- mound photo
- date and time monitored
- new/known mound
- revisited OK (mound is found), sought not found (mound is sought, but not found), not sought (mound is found opportunistically)
- mound profile
- status, active or not (active mounds are currently used by Malleefowl for the incubation of their eggs)
- position of X sticks on arrival
- is the mound freshly scraped or not?
- are eggshells present and if yes, how many?
- are lerps present and if yes, how many?
- are prints of animals present and if yes, of which animal?
- are scats presents and if yes, of which animal?
- are inner crust / moss lichen / herbs present and if yes, how many?
- dimensions of the mound measured in centimetres (cm); height, depth, outer diameter, rim diameter
- evidence of predation
- reposition of X on conclusion of monitoring.

2.2 TRAIL CAMERA MONITORING

Trail cameras were mounted at 12 annual mounds within, and 19 mounds outside the DE. Cameras were mounted on brackets attached to star pickets installed close to the mound and high enough off the ground to view the interior of the mound (**Image 1**).

Image 1: Monitored mound showing location of post and camera

The cameras were deployed from early October 2024 until March 2025.

Cameras mounted at active mounds were serviced by Covalent staff every two months to replace batteries and download image data due to high number of images. The downloaded data was collated into folders for each monitored mound and then reviewed. The review process involved removing images with no fauna present (e.g. wind moving shrubs) and then sorting images with fauna present. Malleefowl visit events were collated and tabulated for GIS analysis.

Recorded images of Malleefowl were reviewed to determine areas of Malleefowl activity. The images were given an initial pass using the AI animal recognition software AddaxAI (van Lunteren 2023) which uses the MegaDetector 5.0 AI model to remove any false triggers. The subsequent images were then categorised using Timelapse software (Greenberg, Godin & Whittington 2019) and the date and timestamps extracted from the metadata, allowing the determination of the number of activity events at each mound. An activity event is defined as an image, or group of images, separated by at least two hours. The results were then analysed using a GIS heat map based on the number of events recorded for each mound. Further analysis of image timestamps was used to verify the number of breeding pairs.

3 FIELD SURVEY RESULTS

3.1 CLIMATIC CONDITIONS

The rainfall received at Mt Holland weather station in the mound building/egg incubation period during the 2024-2025 season was 14.8% below average compared to the long-term average measured at Hyden Bureau of Meteorology (BoM) station (BoM 2025).

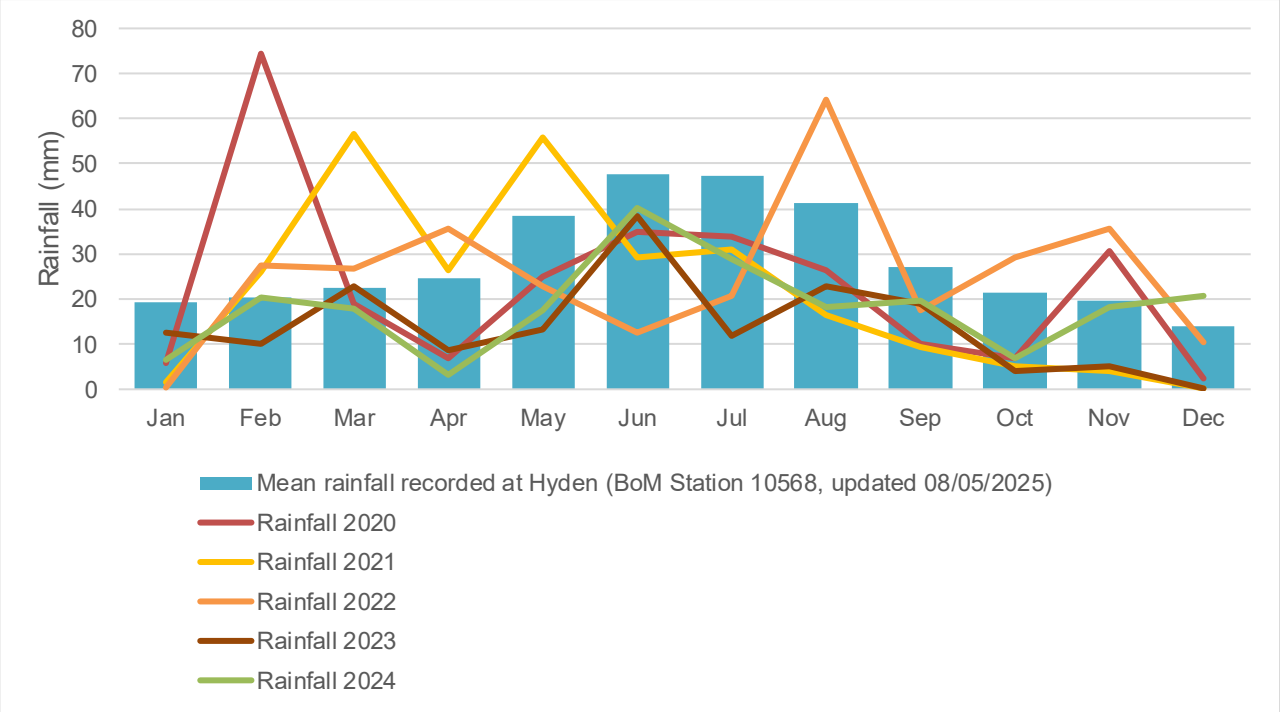

Figure 1: Monthly rainfall at Mt Holland compared to the average rainfall measured at Hyden

3.2 MALLEEFOWL MOUND MONITORING

Ninety Malleefowl mounds were visited and measured to NMRT standards during the 2024-25 monitoring period. Twenty-four mounds classified as annual and 5 year mounds were measured and monitored by trail camera (**Table 5** in **Appendix One**). Of these 24 mounds, eight are within the DE and 16 are outside (**Map 1**). Five mounds were recorded as active, and one mound (MM58) recorded a visitation only. Eleven prospective mounds that were visited were found to be old spoil heaps and have been marked as "do not monitor" for future monitoring. Overall, during the 2024-25 monitoring period, Malleefowl activity within the monitored area has increased by 40% when compared with the 2023-24 monitoring period (**Map 1**).

3.3 TRAIL CAMERA IMAGE REVIEW

Table 6 in **Appendix One** lists all species recorded by the trail cameras at the monitored mounds. Varanid species, Wild Dogs, Feral Cats and Foxes were all recorded on mounds indicating predators of Malleefowl eggs were active at the time of survey.

3.3.1 MALLEEFOWL

Images of Malleefowl were reviewed for behaviour, e.g. scratching or egg laying, with the number of activity events tabulated. Results are discussed with respect to possible abundance based on timing of image capture.

Six (one inside DE; five outside DE) camera monitored Malleefowl mounds recorded Malleefowl and were mapped to indicate their spatial relationship to each other (**Table 2;Map 1**).

Table 2: Malleefowl mounds that recorded activity

Mound ID	Number of recorded activity events	Monitoring Frequency	Inside DE (yes/no)	Inside EZ (yes/no)	Feral Predators
MM58	1	ANNUAL	No	No	No
MM62	76	ANNUAL	Yes	No	Yes
MM70	172	ANNUAL	No	No	No
MM77	109	ANNUAL	No	No	Yes
MM82	74	ANNUAL	No	No	Yes
MM101	157	ANNUAL	No	No	Yes

The cameras at five active mounds as shown in **Table 2** having >20 activity events showed images of pairs of Malleefowl scratching and laying (**Image 2**). Mound 70 is identified as being active for the fourth consecutive year and mound 62 is active for the third consecutive year.

Image 2: Malleefowl investigating mound at MM58

Image 3: Mound building activity at MM62

Image 4: Mound building activity at MM70

Image 5: Mound building activity at MM77

Image 6: Mound building activity at MM82

Image 7: Malleefowl breeding activity at MM101

3.3.2 CHICK EMERGENCE

The review of trail camera footage recorded no chick emergences from any mounds during the 2024-2025 monitoring event.

3.3.3 OTHER SPECIES

Western Brush Wallaby (**Image 3**), Emu, varanids, other small reptiles, and a suite of small woodland bird species were recorded visiting active and inactive Malleefowl mounds. **Table 6** (**Appendix One)** lists all species recorded as visiting the trail camera monitored mounds during the 2024-2025 monitoring event.

Image 8: Western Brush Wallaby at MM24 (inactive)

3.3.4 INTRODUCED SPECIES

Three Wild Dogs/Dingoes were recorded 11 times on one mound outside the DE (MM101).

Feral Cats were recorded by trail cameras at eight Malleefowl mounds: MM17, MM24, MM42, MM62, MM77, MM79, MM82, and MM101 (**Image 4**). Seven of these mounds (MM17, MM24, MM42, MM77, MM79, MM82, and MM101) are outside the DE and one inside (MM62) (**Map 1**). Feral Cats were recorded at active and

inactive Malleefowl mounds. Two of these mounds (MM24 and MM62) were visited by Feral Cats during the previous monitoring event.

A Fox was recorded at MM11 (**Image 5**).

A European Rabbit was recorded from two mounds (MM28 and MM62) (**Image 6**).

Image 9: Feral Cat on MM42 (inactive)

Image 10: Fox at MM11 (inactive)

Image 11: Rabbit on MM62 (active)

3.4 ACTIVITY ANALYSIS

An analysis was performed using the recorded events of activity at each mound to determine areas of Malleefowl activity. Tabulated event numbers for each mound were analysed in GIS to produce a heat map of activity based on the number of events recorded by trail camera images.

Temporal data for the monitoring events is subject to the same GIS analysis to provide comparison between years.

3.4.1 2019-20 ANALYSIS

Malleefowl mound MM17 was the only mound active for the length of the 2019-20 monitoring event (**Figure 2**). Mound MM23 was recorded as active and then subsequently abandoned approximately halfway through the monitoring event, most likely due to Feral Cat visitation (Ecoscape 2020).

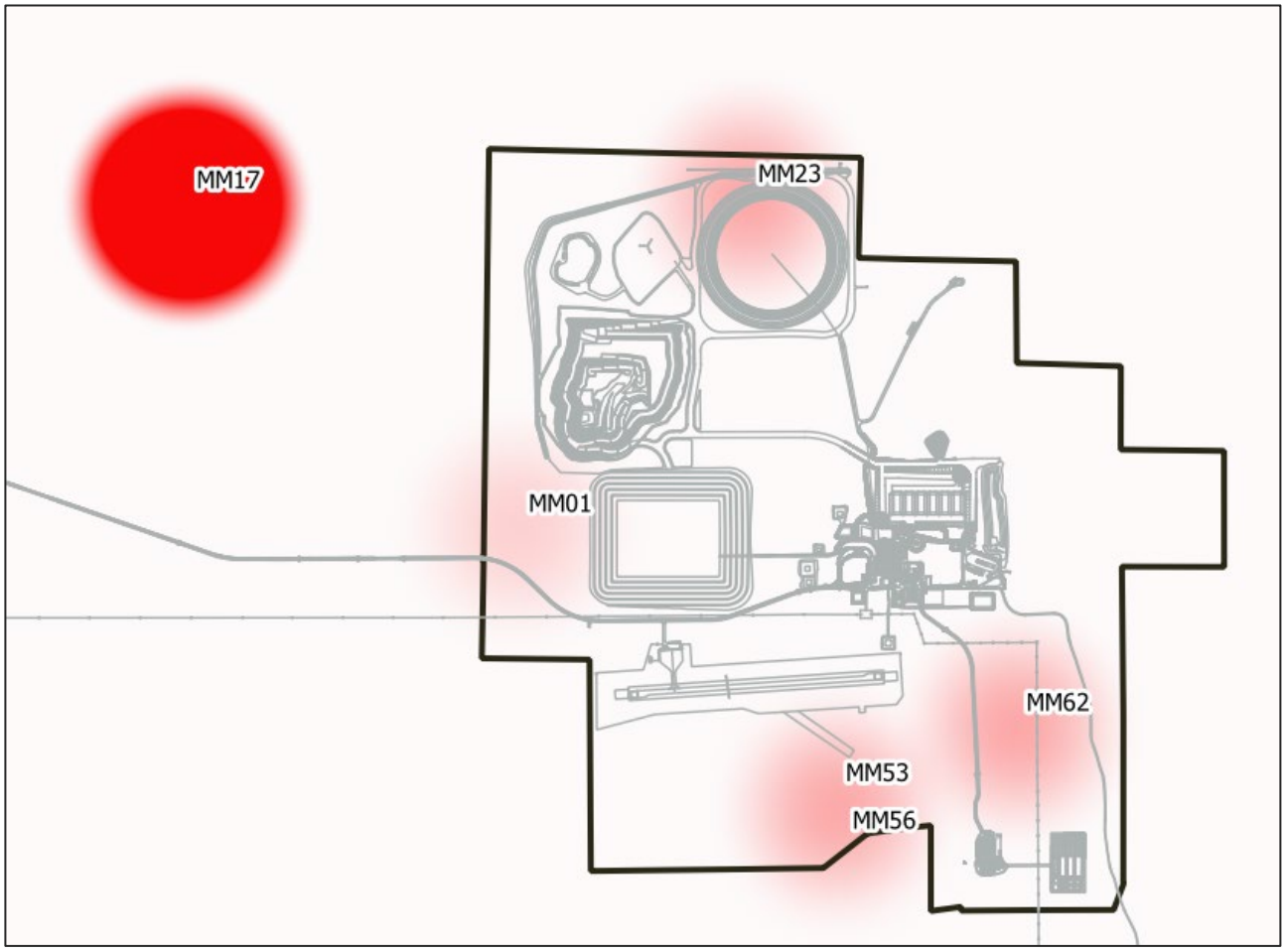

Figure 2: Malleefowl activity heat map based on number of events recorded during 2019-20 at camera monitored mounds

3.4.2 2020-21 ANALYSIS

The activity pattern for 2020-21 is similar to 2019-20 in that Malleefowl activity was recorded around mounds located in the same areas with the exception of MM28 and MM64 (**Figure 3**). The obvious difference is the increase in activity during 2020-21 which was supported by the increase in the number of sightings of Malleefowl being recorded on site since February 2021 (Ecoscape 2021). A potential explanation for the increase in Malleefowl sightings/activity is increased resource availability after an above average rainfall period between March and May (**Figure 1**).

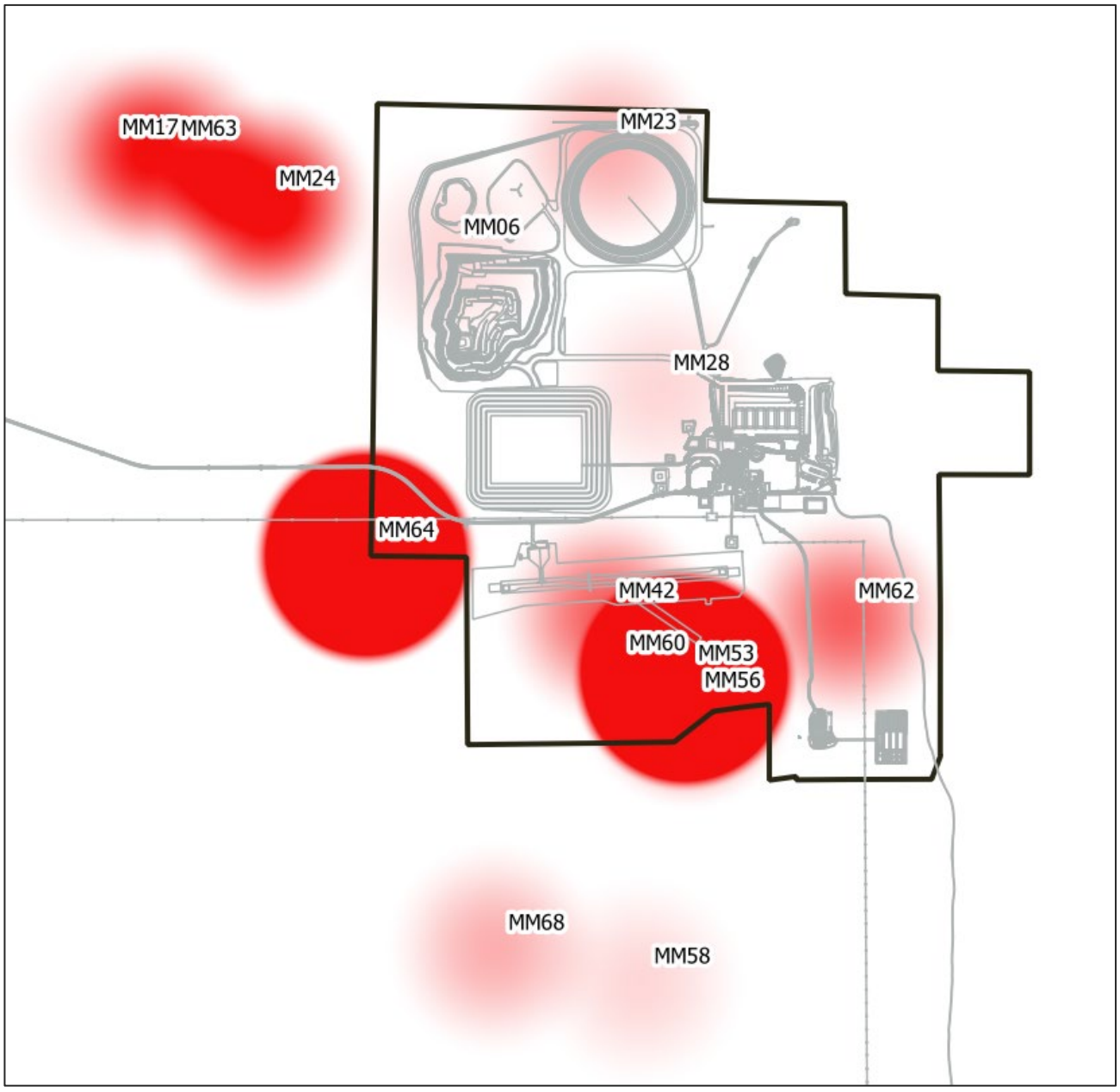

Figure 3: Malleefowl activity heat map based on number of events recorded during 2020-21 at camera monitored mounds

3.4.3 2021-22 ANALYSIS

This analysis determined that there are potentially **four breeding pairs** of Malleefowl within the area of the monitored mounds. **Figure 4** shows that Malleefowl activity is highest around the four active mounds: MM53, MM24, MM70, and MM64. The activity around mounds MM63, MM66, MM65, MM42 and MM68 is not attributed to mound building or egg laying, however, these mounds were visited many times and most likely by the same birds that are nesting at the active mounds. Malleefowl activity was similar in the location of active mounds with the 2020-21 monitoring with the addition of one new active mound MM66 (Ecoscape 2022).

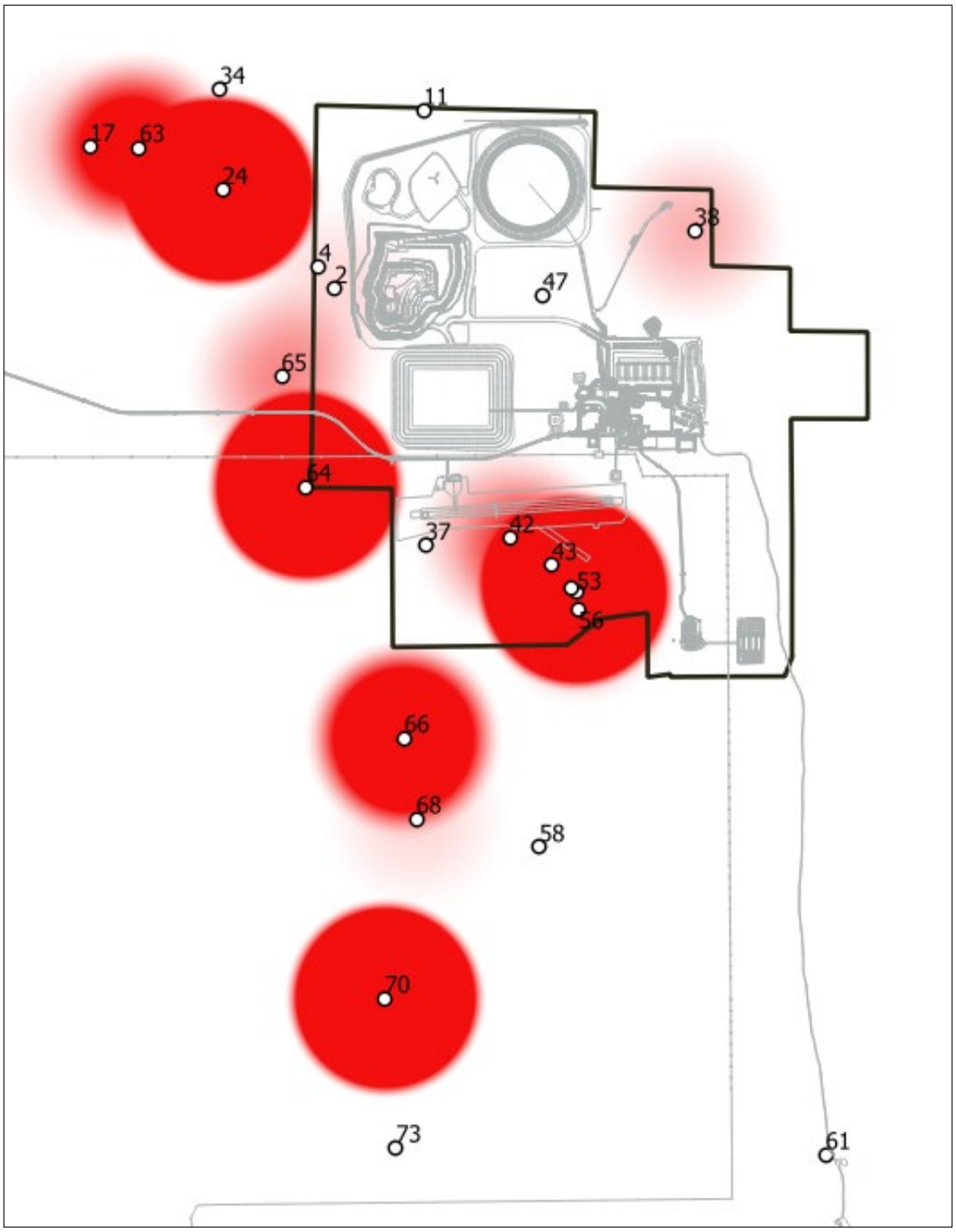

Figure 4: Malleefowl activity heat map based on number of events recorded during 2021-22 at camera monitored mounds

3.4.4 2022-23 ANALYSIS

This analysis determined that there are at least **six distinct breeding pairs** of Malleefowl within the area of monitored mounds. **Figure 5** shows that Malleefowl activity is highest around the six active mounds (MM08, MM62, MM63, MM70, MM76 and MM77). The activity around the other mounds is not attributed to mound building, egg laying or incubating activity, however, these mounds were visited by Malleefowl and most likely by birds that are nesting on active mounds close by. A possible explanation for the increase in activity is the above average rainfall received at Mt Holland and the likely increased availability of resources during the mound building and egg incubation period (**Figure 1**). Overall activity has shifted little compared to previous monitoring events. The abandonment of MM53 may be associated with increased activity in the area from commissioning the aerodrome in January 2022; that breeding pair may have moved to MM62. The abandonment of MM64 may be associated with increased activity from drilling and blasting which commenced in April 2022. MM08 was the exception, however, this mound was monitored opportunistically and is not part of the annual monitoring event (Ecoscape 2023) although it does support the requirements for monitoring 'other' populations as required under MS 1199.

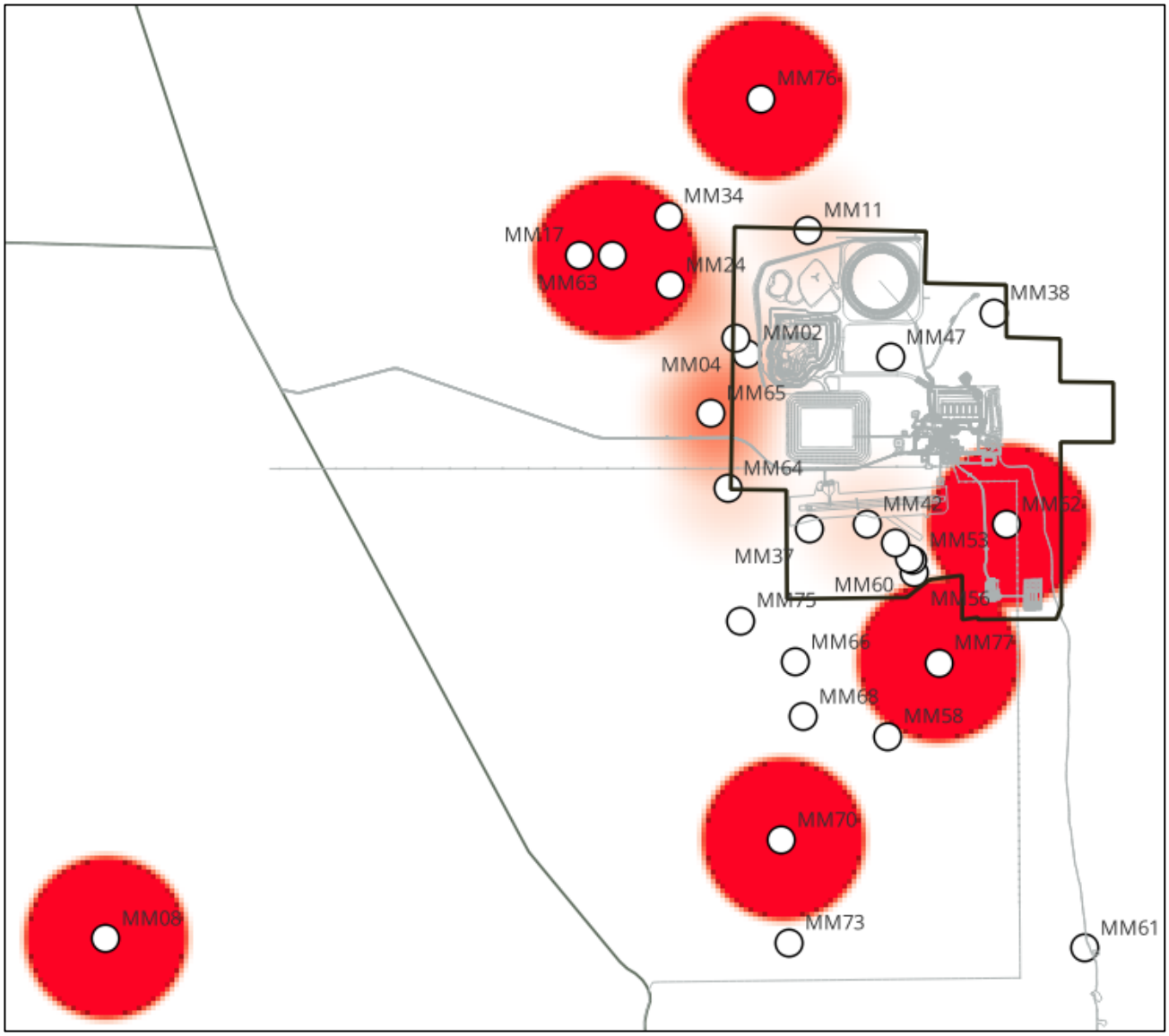

Figure 5: Malleefowl activity heat map based on number of events recorded during 2022-23 at camera monitored mounds

3.4.5 2023-24 ANALYSIS

This analysis determined that there are **three distinct breeding pairs** of Malleefowl within the area monitored. **Figure 6** shows that Malleefowl activity is highest around the three active mounds (MM62, MM70 and MM76). The activity around the other five mounds is not attributed to mound building, egg laying or incubating activity and it is likely that these mounds were visited opportunistically by Malleefowl breeding in proximity. Malleefowl activity has reduced compared with the previous monitoring event (**Figure 5**), with two less breeding pairs in the monitored area (discussed in **Section 4.1.1**).

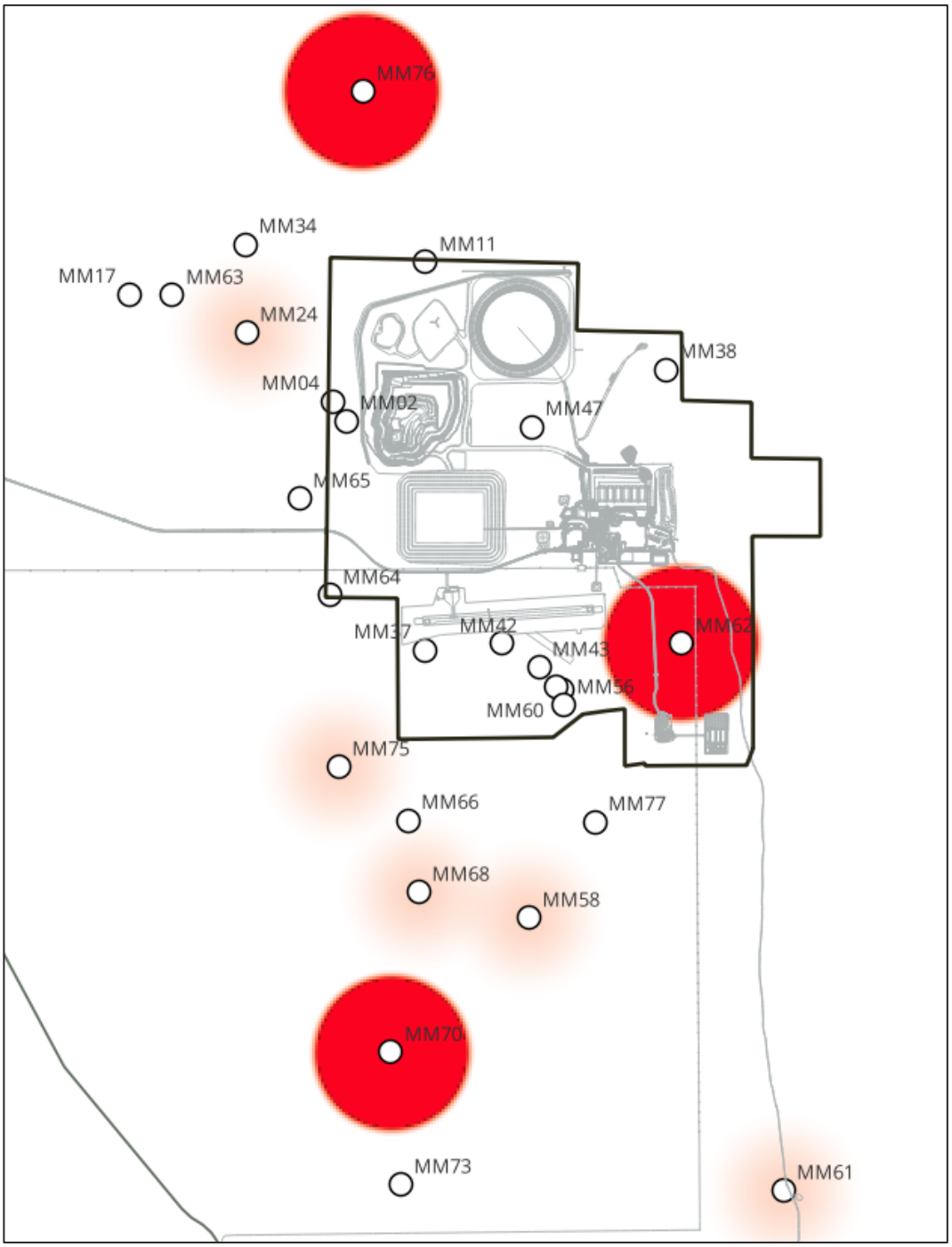

Figure 6: Malleefowl activity heat map based on number of events recorded during 2023-24 at camera monitored mounds

3.4.6 2024-25 ANALYSIS

This analysis determined that there are **five distinct breeding pairs** of Malleefowl within the area monitored (**Table 3**). Analysis of activity timestamps (±3 minutes) demonstrates that mound building activity was occurring on each mound concurrently to other mounds. **Figure 7** shows that Malleefowl activity is highest around the five active mounds (MM62, MM70, MM77, MM82 and MM101). The activity at mound MM58 is not attributed to mound building, egg laying or incubating activity and was an opportunistic visit by a Malleefowl.

Table 3: Malleefowl mound activity analysis

Mound 1	Mound 2	Timestamp 1	Timestamp 2
MM62	MM70	2024-09-03 06:15:30	2024-09-03 06:15:39
MM70	MM77	2024-09-07 09:33:22	2024-09-07 09:35:56
MM62	MM77	2024-09-15 10:25:53	2024-09-15 10:28:15
MM101	MM82	2024-10-21 16:48:51	2024-10-21 16:48:51
MM77	MM82	2024-10-23 06:38:40	2024-10-23 06:39:47
MM70	MM82	2024-10-23 06:47:09	2024-10-23 06:48:32
MM62	MM82	2024-10-24 06:27:53	2024-10-24 06:30:39
MM101	MM70	2024-10-25 18:35:25	2024-10-25 18:38:11
MM101	MM62	2024-11-14 07:02:51	2024-11-14 07:03:39
MM101	MM77	2024-11-16 06:51:12	2024-11-16 06:52:17

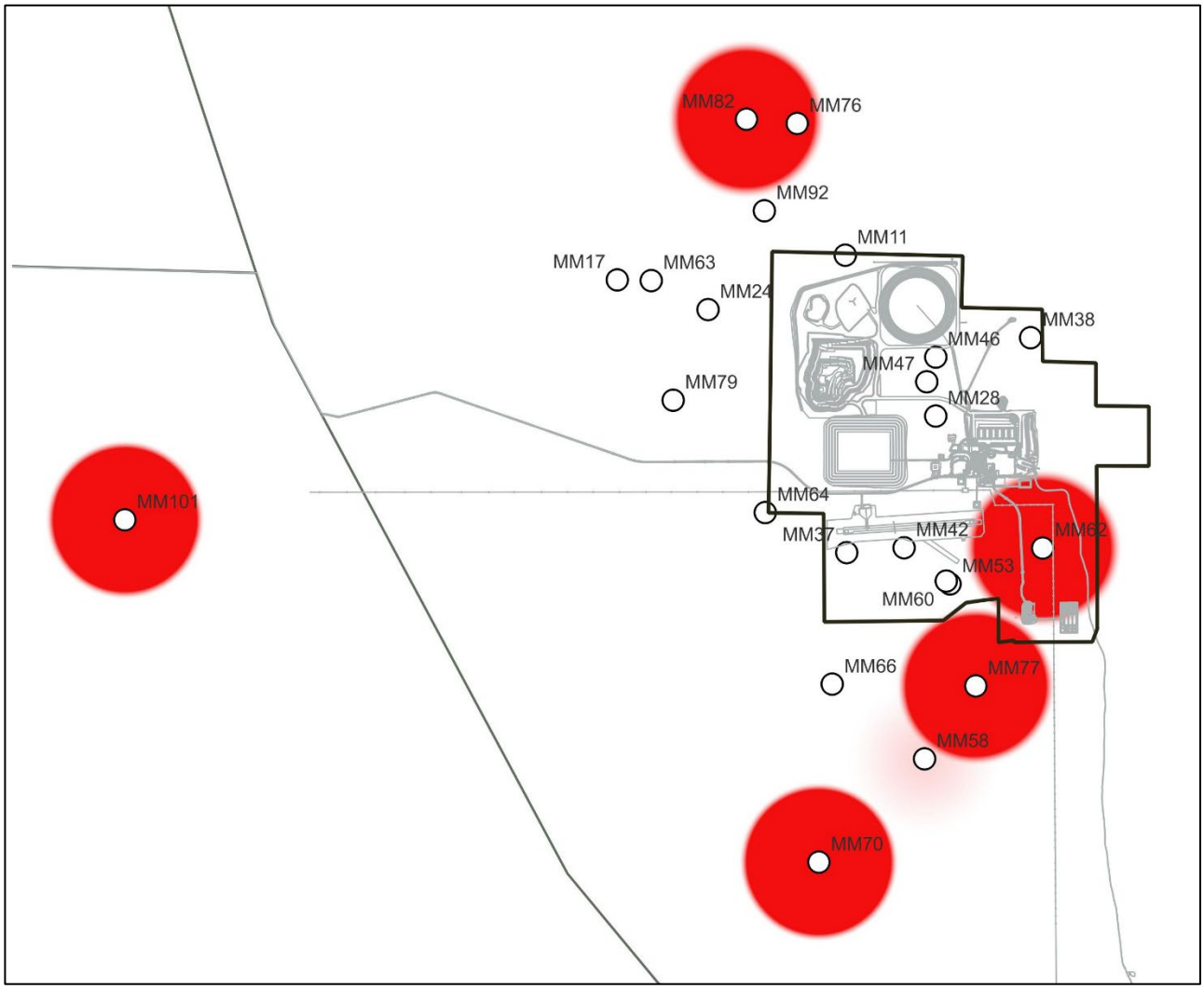

Figure 7: Malleefowl activity heat map based on number of events recorded during 2024-25 at camera monitored mounds

3.5 SKELETON ROCK FIRE IMPACTS

The January 2025 Skeleton Rock Fire burnt an estimated 35,000 hectares of vegetation. A total of 30.9% (576.3 ha) of the DE was burnt and 94.9% (2004.8 ha) of the Life of Mine (LOM) survey area was burnt. The fire burnt three active and 74 inactive mounds (**Image 7;Map 2**). The fire also destroyed 13 trail cameras, resulting in a significant loss of data. Trail cameras were reinstated by Covalent staff at the active mounds in early February, once the area was deemed safe and released by DFES.

Of the five known 2024-25 breeding pairs, three have been recorded on cameras post-fire at MM62, MM70, and MM101. MM62 and MM101 were unaffected by the fire, while MM70 sustained damage to the surrounding vegetation but not to the mound itself. MM77 was abandoned by the breeding pair, however it was not damaged by the fire. MM82 was completely destroyed by the fire, as was the surrounding vegetation, and the mound was abandoned. Mounds burnt or abandoned due to the fire are unlikely to have resulted in any successful chick emergence post-fire.

Image 12: Burnt Malleefowl mound

Image 13: MM62 pre-fire

Image 14: MM62 post-fire

Image 15: MM70 pre-fire

Image 16: MM70 post-fire

Image 17: MM77 pre-fire

Image 18: MM77 post-fire, dragon sitting on abandoned mound

Image 19: MM82 pre-fire

Image 20: MM82 post-fire with juvenile Emu

Image 21: MM101 pre-fire

Image 22: MM101 post-fire

3.6 LIDAR GROUND TRUTHING

Ground truthing of LiDAR results was undertaken on mounds MM107 to MM124. Mounds MM107 and MM108 were found to be inactive mounds. The remaining mounds MM109 to MM124 were not mounds i.e. drill spoil heaps and have been categorised as “Do Not Monitor” (DNM).

4 DISCUSSION

4.1 MALLEEFOWL MONITORING

4.1.1 MALLEEFOWL MOUND MONITORING

Five active mounds were recorded during the 2024-25 monitoring period. All five (MM62, MM70, MM77, MM82, and MM101) were part of the annual monitoring recommendation and two of these (MM62 and MM70) were active during the previous monitoring event (2023-24). Only one of these mounds (MM62) is located within the DE. In addition, one additional mound (MM58) recorded a single Malleefowl visit, possibly from a nearby mound e.g. MM77.

Overall, Malleefowl activity within the monitored area has increased since the 2023-24 monitoring period. **Figure 7** shows the Malleefowl activity recorded during the 2024-25 monitoring period, which has returned to activity levels seen during the 2021-22 and 2022-23 monitoring periods (**Figure 4** and **Figure 5**). Based on the activity analysis there are five known breeding pairs in the survey area. The increase in activity since the previous monitoring period may be due to an increase (although still 14.8% lower than the long-term average) in rainfall when compared to the 2023-24 monitoring period, which experienced less than 50% of the mean annual rainfall occurring during the egg incubation period (**Figure 1**). In addition, during the 2024-25 season, Malleefowl may have returned to known monitored mounds from yet-to-be-discovered mounds.

The estimated population within the DE has been one breeding pair since monitoring began (Ecoscape 2020). This was seen again in the 2024-25 monitoring period, with mound MM62 being active for the third year in a row. The 'local' population is defined by a 5 kilometre buffer surrounding the DE, excluding the EGLP water pipeline. This area is comprised of 1,984 hectares, and contains majority of all known mounds (excluding MM08, MM16, and MM101).

The Skeleton Rock fire destroyed an extensive area (over 35,000 hectares) of Malleefowl habitat (**Map 2**). Due to the timing of the fire (January), it is understood that most chicks would have emerged and disbursed. However, Malleefowl deaths are likely, both due to direct impacts from the fire (being burnt, heat, oxygen depletion, smoke inhalation) or indirectly due to loss of food sources and increased predation due to changes to visibility (lack of shelter/hiding areas), and increased predator pressure as a result of other prey animals becoming less abundant. The fire will also have an ongoing effect with the loss of leaf litter required for incubation of eggs in the mounds; this leaf litter will likely take several years to build back up to levels that are required for successful incubation and diverse understorey for year-round food availability.

In general, Malleefowl can take between 15-20 years to breed again at sites completely burnt by fire, and occasionally within 10 years of fire if unburnt patches occur nearby (DCCEEW 2024). Due to the long period of time required for Malleefowl to reestablish in a burnt area, it is possible that an assessment against the current trigger and threshold criteria will result in a breach. It is therefore recommended that monitoring should include mounds in the 'local' area to identify breeding pairs that have potentially been displaced by the fire. The 2025-26 monitoring event will therefore compromise all mounds listed as ANNUAL in **Table 7** (**Appendix One**), and include any unburnt mounds listed as 5-YR.

4.1.1.1 Malleefowl Chicks

No chick emergences from any mounds were recorded during the 2024-2025 monitoring period. This does not mean that no chicks have emerged, and not all previous monitoring events have recorded chick emergence (Ecoscape 2022, 2021). Possible reasons for no recorded chick emergence are the placement of trail cameras with a possible obstruction of the field of view by nest building material, location within the mound where the chick emerges, and behaviour of the chick after emerging – whether it stays around and triggers the cameras or disappears in the surrounding vegetation. Due to this limitation, chick emergence data is not considered a reliable indicator of breeding success. The use of Addax AI was not considered a limiting factor in the detection of chicks as it successfully identifies animals of a similar size and smaller e.g. Thornbills, Silvereyes, dragons etc.

4.1.2 ACTIVITY ANALYSIS

The analysis of images to produce activity patterns at the monitored mounds and the resultant heat maps indicate five areas of high activity for the 2024-25 monitoring period (**Figure 7)**. Further analysis of the timestamps (±3 minutes) (**Table 3**) substantiates that each of the mounds was experiencing mound building and laying activity concurrently to the other mounds with high levels of activity, verifying that there are five pairs.

4.1.2.1 Assessment against trigger/threshold criteria

An assessment against the trigger and threshold criteria as outlines in the EGLP TFEMP (Covalent 2022) is outlined below (**Table 3**).

Table 4: Assessment against trigger/threshold criteria

Criteria	Response
Trigger Criteria	The trigger and threshold criteria were formulated to address Condition 3-1(2) of MS 1199 which states *No direct or indirect adverse impacts to Malleefowl and Chuditch within the Development Envelope*. The estimated local population within the DE has been one breeding pair since monitoring began (Ecoscape 2020). Therefore neither the trigger nor the threshold criteria have been exceeded. In comparison to the previous 2023-24 monitoring period the 2024-25 monitoring period has seen a 40% increase in active mounds.
A decrease in the estimated local population number (based on temporal analysis) over a consecutive two-year period.	
Threshold criteria	
A project related 50% decrease in the estimated local population (based on temporal analysis) over a consecutive two-year period.	

4.1.3 INTRODUCED PREDATORS

Over the 2024-25 monitoring period eight different mounds recorded visits by Feral Cats. Seven of these mounds (MM17, MM24, MM42, MM77, MM79, MM82, and MM101) are outside the DE and one inside (MM62) (**Map 1**). Feral Cats were recorded at both active and inactive Malleefowl mounds. Two of these mounds (MM24 and MM62) were visited by Feral Cats during the previous monitoring event. It is estimated that there are at least 3-4 Cats in the Survey Area, however, as all Cats have similar tabby markings it is not possible to identify the number of individuals with certainty. However, the presence of kittens (MM24, MM77, and MM82) in 2024-25 indicates a potentially increasing population.

A single Fox was recorded on an inactive mound (MM11). Spatially, all Fox records occur within 5 km of each other to the north-east of the DE, with five of the six records occurring within 3.5 km of each other. This suggests that there is likely a single resident Fox in this area.

Three Dogs were recorded 11 times on one active mound outside the DE (MM101), compared to the 2023-24 monitoring period where no dogs were recorded. In the camera images the dogs can be seen digging for eggs in the mound.

In addition to the introduced predators recorded on Malleefowl mounds during the 2024-25 monitoring period, a Cat was caught in a cage trap, and two cats were recorded on trail cameras during the 2024 Chuditch monitoring program.

5 RECOMMENDATIONS

These recommendations pertain to monitoring of the likely Malleefowl population within the overall project area and are aligned with the guidelines of the NMRT Monitoring Manual and best available literature.

Monitoring of mounds both within the DE and outside (i.e. local population) may, by using comparative data, provide insight on the number of birds breeding and foraging that may be impacted by potential clearing activity and other disturbances from mining (i.e. noise related), and is recommended to be conducted annually.

To provide Malleefowl population health and abundance data the following aspects are recommended to be monitored annually:

- trail camera monitoring during the egg incubation season for 2025-26 (October to February) of all Malleefowl mounds that have been identified as ANNUAL, within and adjacent to the DE and any unburnt mounds listed as 5 – YR mounds.
- maintain database of Malleefowl sightings and Malleefowl mortality within a fauna register and report annually on number and location of active mounds.
- collate image data and report on status of all monitored mounds.
- collate and report on records of sightings of feral predators and images captured on cameras at the monitored mounds.
- continue ground truthing of LiDAR data within and outside the DE to potentially identify if population displacement is occurring.
- It is recommended that monitoring should also include the identification of mounds in the 'local' (5 km) area that are showing signs of activity from breeding pairs that have potentially been displaced by the fire.

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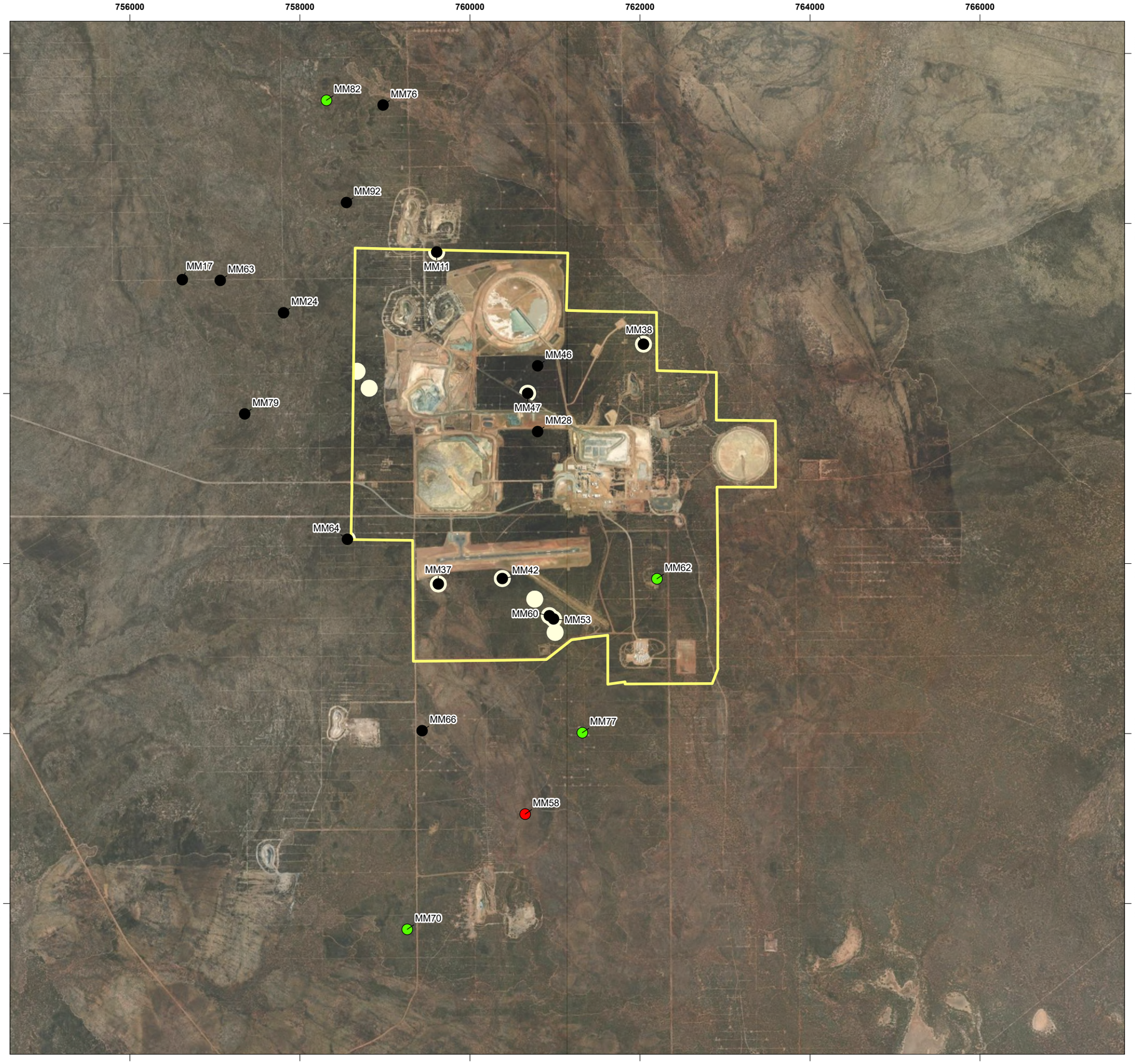
MAPS



LEGEND

- Development Envelope
- Malleefowl Exclusion Zones

Mound Activity Status 2024

- Active
- Visited by Malleefowl
- Not Active

DATA SOURCES:
SOURCE DATA: MONITORING DATA (ECOSCAPE 2024)
BASEMAP: ESRI WORLD IMAGERY (2022)
SERVICE LAYERS: WORLD IMAGERY: EARTHSTAR GEOGRAPHICS

ecoscape

MALLEEFOWL ACTIVITY

COVALENT FAUNA MONITORING 2024

covalent LITHIUM

COORDINATE SYSTEM: GDA 1994 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA 1994
UNITS: METER

N

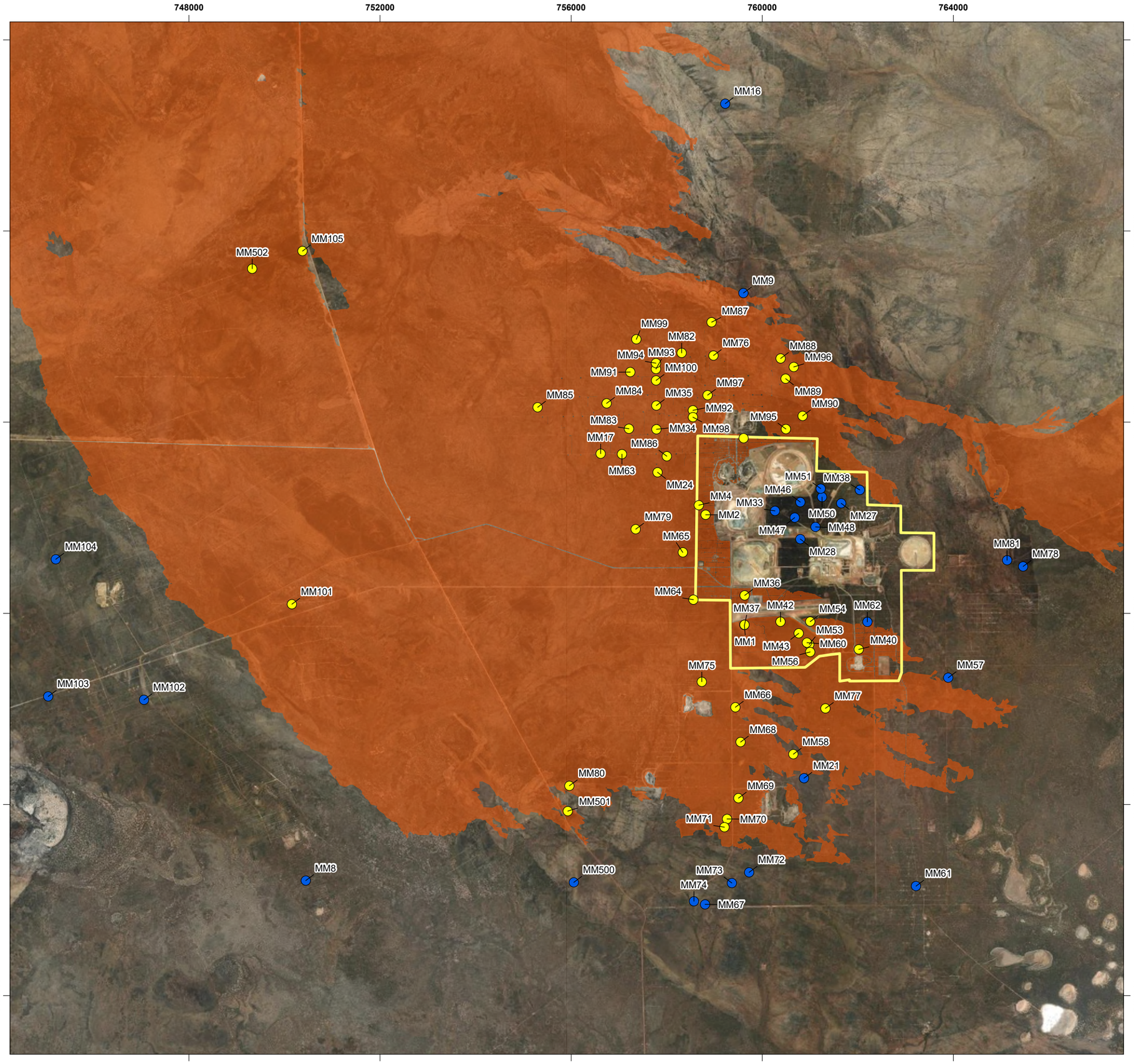
SCALE: 1:45,000 @ A3

0 1 2 km

PROJECT NO: 4936-25

REV	AUTHOR	APPROVED	DATE
0	SB	RH	16/07/2025

MAP 01



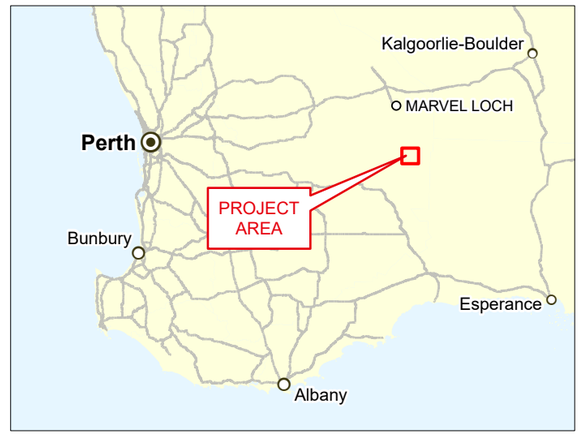
LEGEND

- Development Envelope
- Fire Scar January 2025

Malleefowl Mounds

- Not impacted
- Fire Impacted

DATA SOURCES:
SOURCE DATA: MONITORING DATA (ECOSCAPE 2024)
BASEMAP: ESRI WORLD IMAGERY (2022)
SERVICE LAYERS: WORLD IMAGERY: EARTHSTAR GEOGRAPHICS



ecoscape

MALLEEFOWL MOUNDS FIRE SCAR JAN 2025

COVALENT FAUNA MONITORING 2023

covalent LITHIUM

COORDINATE SYSTEM: GDA 1994 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA 1994
UNITS: METER

N

SCALE: 1:80,000 @ A3

0 1 2 3 km

PROJECT NO: 4936-25

REV	AUTHOR	APPROVED	DATE
0	SB	RH	16/07/2025

MAP 02

APPENDIX ONE MONITORING RESULTS

Table 5: Malleefowl mounds visited and monitored during the 2024/2025 season (highlight indicates ACTIVE mounds)

Mound No.	Comments	Easting	Northing	Within DE (In/Out)	Within EZ (Yes/No)	Action	Fire Impact
MM-01	Visited and measured	758852.115	6445166.446	In	No	5 YR	YES
MM-02	Visited and measured	758813.448	6446060.503	In	Yes	ANNUAL	YES
MM-04	Visited and measured	758670.381	6446260.002	In	Yes	ANNUAL	YES
MM-08	Visited and measured	750443.977	6438407.562	Out	No	5 YR	NO
MM-09	Visited and measured	759606.013	6450695.498	Out	No	5 YR	NO
MM-11	Measured and monitored with trail camera	759607.758	6447662.217	In	Yes	ANNUAL	YES
MM-16	Visited and measured	759229.856	6454667.376	Out	No	5 YR	NO
MM-17	Measured and monitored with trail camera	756615.717	6447337.830	Out	No	5 YR	YES
MM-18	Visited and measured	754749.188	6463149.524	Out	No	DNM	NO
MM-21	Visited and measured	760873.011	6440542.531	Out	No	5 YR	NO
MM-24	Measured and monitored with trail camera	757806.808	6446948.110	Out	No	ANNUAL	YES
MM-27	Visited and measured	761650.652	6446300.043	In	No	5 YR	NO
MM-28	Measured and monitored with trail camera	760795.174	6445550.490	In	No	5 YR	NO
MM-34	Visited and measured	757783.435	6447848.863	Out	No	ANNUAL	NO
MM-35	Visited and measured	757777.049	6448344.429	Out	No	5 YR	YES
MM-36	Visited and measured	759629.965	6444372.530	In	No	5 YR	YES
MM-37	Measured and monitored with trail camera	759626.849	6443758.086	In	Yes	ANNUAL	YES
MM-38	Measured and monitored with trail camera	762040.081	6446579.047	In	Yes	ANNUAL	YES
MM-40	Visited and measured	762022.020	6443245.373	In	No	5 YR	NO
MM-42	Measured and monitored with trail camera	760379.810	6443822.014	In	Yes	ANNUAL	YES
MM-43	Visited and measured	760761.192	6443579.717	In	Yes	ANNUAL	YES
MM-46	Measured and monitored with trail camera	760795.560	6446324.259	In	No	5 YR	YES
MM-47	Measured and monitored with trail camera	760677.573	6446000.725	In	Yes	ANNUAL	NO
MM-48	Visited and measured	761118.968	6445810.517	In	No	5 YR	NO
MM-50	Visited and measured	761249.805	6446431.236	In	No	5 YR	NO
MM-51	Visited and measured	761225.945	6446606.486	In	No	5 YR	NO
MM-53	Measured and monitored with trail camera	760982.141	6443346.783	In	Yes	ANNUAL	NO
MM-54	Visited and measured	761005.091	6443822.440	In	No	5 YR	YES
MM-56	Visited and measured	761000.850	6443188.468	In	Yes	ANNUAL	YES
MM-57	Visited and measured	763895.800	6442648.507	Out	No	5 YR	YES
MM-58	Measured and monitored with trail camera	760648.527	6441050.812	Out	No	5 YR	NO
MM-60	Measured and monitored with trail camera	760933.270	6443384.708	In	Yes	ANNUAL	YES
MM-61	Visited and measured	763215.182	6438290.838	Out	No	ANNUAL	YES
MM-62	Measured and monitored with trail camera	762196.229	6443820.320	In	No	ANNUAL	NO
MM-63	Measured and monitored with trail camera	757061.506	6447328.773	Out	No	ANNUAL	NO
MM-64	Measured and monitored with trail camera	758557.619	6444283.795	Out	No	ANNUAL	YES
MM-65	Visited and measured	758335.563	6445273.825	Out	No	ANNUAL	YES

Mound No.	Comments	Easting	Northing	Within DE (In/Out)	Within EZ (Yes/No)	Action	Fire Impact
MM-66	Measured and monitored with trail camera	759436.429	6442031.938	Out	No	5 YR	YES
MM-67	Visited and measured	758801.356	6437907.976	Out	No	5 YR	YES
MM-68	Visited and measured	759544.462	6441304.689	Out	No	ANNUAL	NO
MM-69	Visited and measured	759499.219	6440130.721	Out	No	5 YR	YES
MM-70	Measured and monitored with trail camera	759261.478	6439695.132	Out	No	ANNUAL	YES
MM-71	Visited and measured	759206.902	6439523.211	Out	No	5 YR	YES
MM-72	Visited and measured	759723.637	6438578.103	Out	No	5 YR	YES
MM-73	Visited and measured	759362.464	6438353.199	Out	No	5 YR	NO
MM-74	Visited and measured	758567.955	6437972.759	Out	No	5 YR	NO
MM-75	Visited and measured	758731.860	6442568.449	Out	No	ANNUAL	NO
MM-76	Measured and monitored with trail camera	758999.016	6449388.514	Out	No	ANNUAL	YES
MM-77	Measured and monitored with trail camera	761321.001	6442008.524	Out	No	ANNUAL	YES
MM-78	Visited and measured	765459.215	6444977.638	Out	No	ANNUAL	YES
MM-79	Measured and monitored with trail camera	757349.909	6445761.283	Out	No	5 YR	NO
MM-80	Visited and measured	755962.351	6440393.767	Out	No	5 YR	YES
MM-81	Visited and measured	765124.463	6445109.909	Out	No	5 YR	YES
MM-82	Measured and monitored with trail camera	758311.933	6449448.383	Out	No	ANNUAL	YES
MM-83	Visited and measured	757208.927	6447861.243	Out	No	5 YR	YES
MM-84	Visited and measured	756742.132	6448392.499	Out	No	5 YR	YES
MM-85	Visited and measured	755297.847	6448310.132	Out	No	5 YR	YES
MM-86	Visited and measured	758001.352	6447285.694	Out	No	5 YR	YES
MM-87	Visited and measured	758938.312	6450090.883	Out	No	ANNUAL	YES
MM-88	Visited and measured	760383.582	6449332.211	Out	No	5 YR	YES
MM-89	Visited and measured	760487.899	6448909.251	Out	No	5 YR	YES
MM-90	Visited and measured	760844.475	6448129.716	Out	No	5 YR	YES
MM-91	Visited and measured	757236.990	6449047.709	Out	No	ANNUAL	YES
MM-92	Measured and monitored with trail camera	758547.048	6448246.543	Out	No	5 YR	YES
MM-93	Visited and measured	757774.771	6449111.646	Out	No	5 YR	YES
MM-94	Visited and measured	757774.771	6449234.855	Out	No	5 YR	YES
MM-95	Visited and measured	760494.079	6447854.861	Out	No	5 YR	YES
MM-96	Visited and measured	760658.679	6449153.414	Out	No	5 YR	YES
MM-97	Visited and measured	758854.863	6448563.328	Out	No	ANNUAL	YES
MM-98	Visited and measured	758548.269	6448104.250	Out	No	5 YR	YES
MM-99	Visited and measured	757364.068	6449734.307	Out	No	ANNUAL	YES
MM-100	Visited and measured	757776.743	6448872.127	Out	No	5 YR	YES
MM-101	Measured and monitored with trail camera	750153.734	6444186.009	Out	No	ANNUAL	YES
MM-102	Visited and measured	747059.030	6442191.426	Out	No	5 YR	YES
MM-103	Visited and measured	745054.147	6442260.418	Out	No	ANNUAL	NO
MM-104	Visited and measured	745212.596	6445132.389	Out	No	5 YR	NO
MM-105	Visited and measured	750375.654	6451578.245	Out	No	5 YR	NO
MM-107	Visited and measured	755928.752	6439861.943	Out	No	5 YR	YES
MM-108	Visited and measured	749323.221	6451211.063	Out	No	5 YR	YES
MM-109	Visited	757765.900	6449382.706	Out	No	DNM	YES

Mound No.	Comments	Easting	Northing	Within DE (In/Out)	Within EZ (Yes/No)	Action	Fire Impact
MM-110	Visited	757771.814	6449721.778	Out	No	DNM	YES
MM-111	Visited	758906.389	6447798.004	Out	No	DNM	YES
MM-112	Visited	758689.586	6447816.614	Out	No	DNM	YES
MM-113	Visited	758206.664	6447900.823	Out	No	DNM	YES
MM-114	Visited	758948.269	6449252.551	Out	No	DNM	YES
MM-115	Visited	759296.310	6448604.834	Out	No	DNM	YES
MM-116	Visited	755860.371	6448725.109	Out	No	DNM	YES
MM-117	Visited	759055.692	6448463.827	Out	No	DNM	YES
MM-118	Visited	758662.233	6448455.374	Out	No	DNM	YES
MM-119	Visited	757764.653	6449918.551	Out	No	DNM	YES

Table 6: Species recorded by trail camera (* denotes introduced species)

Species	Common Name
Acanthiza chrysorrhoa	Yellow-rumped Thornbill
Barnardius zonarius	Australian Ringneck
**Canis familiaris dingo*	Dog/Dingo
Cinclosoma clarum	Western Chestnut Quail-thrush (Copperback Quail-thrush)
Corvus coronoides	Australian Raven
Ctenophorus cristatus	Bicycle Dragon, Crested Dragon
Dromaius novaehollandiae	Emu
Drymodes brunneopygia	Southern Scrub Robin
**Felis catus*	Cat
Gavicalis virescens	Singing Honeyeater
Leipoa ocellata	Malleefowl
Macropus fuliginosus melanops	Western Grey Kangaroo
Notamacropus irma	Western Brush Wallaby
Notomys mitchellii	Mitchell's Hopping Mouse
Oreoica gutturalis	Crested Bellbird
**Oryctolagus cuniculus*	Rabbit
Phaps elegans	Brush Bronzewing
Pogona minor minor	Western Bearded Dragon
Purnella albifrons	White-fronted Honeyeater
Strepera versicolor	Grey Currawong
Tiliqua occipitalis	Western Bluetongue
Tiliqua rugosa	Shingleback/Bobtail
Varanus gouldii	Sand Goanna
Varanus rosenbergi	Heath Goanna
**Vulpes vulpes*	European Fox

Table 7: Malleefowl mounds for 2025-26 monitoring program / recommendations

Mound No.	Easting	Northing	Within DE (Yes/No)	Within EZ (Yes/No)	Proposed Action
1	759624.44	6443755.08	Yes	No	5 - YEAR
2	758814.450	6446062.100	Yes	Yes	ANNUAL
4	758671.410	6446261.450	Yes	Yes	ANNUAL
8	750445.19	6438407.4	No	No	5 - YEAR
9	759604.13	6450699.9	No	No	5 - YEAR
11	759608.780	6447663.710	Yes	Yes	ANNUAL
16	759224.28	6454662.7	No	No	5 - YEAR
17	756616.660	6447339.360	No	No	5 - YEAR
18	754750.8	6463149	No	No	5 - YEAR
21	760873.7	6440549.6	No	No	5 - YEAR
24	757807.780	6446949.680	No	No	ANNUAL
27	761651.63	6446301.6	Yes	No	5 - YEAR
28	760796.08	6445552.2	Yes	No	5 - YEAR
33	760265.72	6446143.1	Yes	No	5 - YEAR
34	757784.400	6447850.350	No	No	5 - YEAR
35	757782.98	6448346.6	No	No	5 - YEAR
36	759630.33	6444374.6	Yes	No	5 - YEAR
37	759627.840	6443759.560	Yes	Yes	ANNUAL
38	762041.070	6446580.550	Yes	Yes	ANNUAL
40	762018.78	6443246	Yes	No	5 - YEAR
42	760380.820	6443823.550	Yes	Yes	ANNUAL
43	760762.250	6443581.310	Yes	Yes	ANNUAL
46	760796.61	6446325.8	Yes	No	5 - YEAR
47	760678.550	6446002.240	Yes	Yes	ANNUAL
48	761113.91	6445807.6	Yes	No	5 - YEAR
50	761250.79	6446432.9	Yes	No	5 - YEAR
51	761222.7	6446607.6	Yes	No	5 - YEAR
53	760983.090	6443348.360	Yes	Yes	ANNUAL
54	761003.17	6443827.2	Yes	No	5 - YEAR
56	761001.850	6443190.010	Yes	Yes	ANNUAL
57	763891.58	6442652.8	No	No	ANNUAL
58	760649.570	6441052.370	No	No	ANNUAL
60	760934.210	6443386.150	Yes	Yes	ANNUAL
61	763216.780	6438292.680	No	No	ANNUAL
62	762200.000	6443820.000	Yes	No	ANNUAL
63	757062.490	6447330.290	No	No	ANNUAL
64	758558.640	6444285.370	Yes	Yes	ANNUAL
65	758336.650	6445274.990	No	No	5 - YEAR
66	759437.293	6442033.674	No	No	ANNUAL
67	758802.332	6437909.483	No	No	5 - YEAR
68	759545.240	6441306.261	No	No	ANNUAL
69	759500.117	6440132.208	No	No	5 - YEAR
70	759262.392	6439696.610	No	No	ANNUAL
71	759207.968	6439524.882	No	No	5 - YEAR

Mound No.	Easting	Northing	Within DE (Yes/No)	Within EZ (Yes/No)	Proposed Action
72	759724.731	6438579.488	No	No	5 - YEAR
73	759363.117	6438355.697	No	No	ANNUAL
74	758568.944	6437974.252	No	No	5 - YEAR
75	758733.83	6442566.13	No	No	ANNUAL
76	758978.000	6449393.000	No	No	ANNUAL
77	761322.000	6442010.000	No	No	ANNUAL
78	765459	6444980	No	No	ANNUAL
79	757350	6445760	No	No	ANNUAL
80	755962	6440390	No	No	5 - YEAR
81	765124	6445110	No	No	5 - YEAR
82	758311.933	6449448.383	No	No	ANNUAL
83	757208.927	6447861.243	No	No	5 - YEAR
84	756742.132	6448392.499	No	No	5 - YEAR
85	755297.847	6448310.132	No	No	5 - YEAR
86	758001.352	6447285.694	No	No	5 - YEAR
87	758938	6450090	No	No	5 - YEAR
88	760383.582	6449332.211	No	No	5 - YEAR
89	760487.899	6448909.251	No	No	5 - YEAR
90	760844.475	6448129.716	No	No	5 - YEAR
91	757236.990	6449047.709	No	No	5 - YEAR
92	758547.048	6448246.543	No	No	ANNUAL
93	757774.771	6449111.646	No	No	5 - YEAR
94	757774.771	6449234.855	No	No	5 - YEAR
95	760494.079	6447854.861	No	No	5 - YEAR
96	760658.679	6449153.414	No	No	5 - YEAR
97	758854.863	6448563.328	No	No	ANNUAL
98	758548.269	6448104.250	No	No	5 - YEAR
99	757364.068	6449734.307	No	No	ANNUAL
100	757776.743	6448872.127	No	No	5 - YEAR
101	750154	6444190	No	No	ANNUAL
102	747059	6442190	No	No	5 - YEAR
103	745054	6442260	No	No	ANNUAL
104	745213	6445130	No	No	5 - YEAR
105	750376	6451580	No	No	5 - YEAR