Appendix 7 – Pre-Clearance Survey – Autumn, Myara North (GHD, 2023)

Pre-clearance fauna survey - Autumn

Myara North

Alcoa of Australia Limited

30 October 2023

→ **The Power of Commitment**

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1. Introduction

1.1 Project background

Alcoa of Australia Limited (Alcoa) operate the Huntly Mine within mining lease ML1sa, in the Northern Jarrah Forest Interim Biogeographic Regionalisation for Australia (IBRA) subregion. Alcoa propose to transition the Huntly Mine operations from the current Myara mine region into the Myara North mine region, as early as 2023 pending the granting of legislative approvals.

The Huntly Mine transition into the Myara North mine region is a component of the Pinjarra Alumina Refinery Revised Proposal (the Alcoa Proposal). The Alcoa Proposal will be assessed by the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986 (EP Act) and the Mine component is a controlled action (EPBC 2022/09204) to be assessed and approved under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

GHD has prepared, on behalf of Alcoa, a comprehensive Environmental Review Document for the Alcoa Proposal, which includes commitments for environmental management, including pre-clearance surveys. The pre-clearance surveys will inform the following:

– Amendment of preliminary infrastructure or facility designs to avoid, where practicable, populations or key habitat features for conservation significant species
– Construction management
– Preparation of EPA or EPBC Act compliance reports regarding impacts, management or offsets for conservation significant species.

1.2 Purpose of this report

The purpose of the survey was to identify the presence of significant fauna and significant fauna habitat features in the survey area.

The outcome of the survey and information supplied in this biological survey report will be used to inform the environmental assessment and approvals process, and the results will be used to assist in the preparation of Environmental Impact Assessment documentation. The survey findings may also assist in developing appropriate environmental management strategies to avoid and minimise environmental impacts.

1.3 Location

The survey area is located at the Alcoa mining lease, Myara North. The start of the survey area is approximately 7 km east of Jarrahdale, WA. The survey location is presented in Figure 1, Appendix A.

1.4 Scope of works

The general scope of works required for the project is summarised in Table 1 below. This report only pertains to the fauna component of the Summer/Autumn 2023 surveys.

Table 1 Pre-clearance survey scope overview

Season	Survey area	Survey	Deliverable
Summer / Autumn 2023	- Haul Road network (50m buffer) - Myara North & Kisler facilities areas	- Targeted survey for Black Cockatoos and conservation significant mammal species, for all areas	- Summer/Autumn 2023 survey report suitable for submission to EPA.

In addition to the report, figures including field survey results (fauna records, tree records and habitat features), appendices including field data, photographs and species inventory, and the survey spatial data (ArcGIS shapefiles) provided in GDA94 datum consistent with IBSA requirements is to be provided.

1.5 Relevant legislation, conservation codes and background information

In WA some fauna are protected under both Federal and State Government legislation. In addition, regulatory authorities also provide a range of guidance and information on expected standards and protocols for environmental surveys.

An overview of key legislation and guidelines, conservation codes and background information relevant to this fauna survey are provided in Appendix B.

1.6 Report limitations and assumptions

This report: has been prepared by GHD for Alcoa of Australia Limited and may only be used and relied on by Alcoa of Australia Limited for the purpose agreed between GHD and Alcoa of Australia Limited as set out in section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Alcoa of Australia Limited arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

2. Methodology

2.1 Desktop assessment

A short review of GHD (2021) results has been provided for the desktop component of the survey.

2.2 Field survey

2.2.1 Survey timing and personnel

Field surveys comprised of a pre-clearance fauna survey. Two site visits were undertaken to complete the survey, these are detailed in Table 2. The field survey was led by Zoologist, Jack Eastwood and assisted by other GHD Zoologists. The experience of these staff members is presented in Table 3.

Table 2 Field survey timing, type and details

Survey type	Date	Tasks	Personnel
Pre-clearance survey	20th – 25th February 2023	Black Cockatoo tree assessment, significant fauna habitat assessment, significant fauna records and camera deployment.	Jack Eastwood Brad Maryan
Remote equipment collection and finalised pre-clearance survey	20th – 23rd March 2023	Remote equipment collection and Black Cockatoo tree assessment, significant fauna habitat assessment, significant fauna records	Brad Maryan Dylan Goldspink

Table 3 Personnel experience

Name	Years of experience	Role	Survey conducted
Jack Eastwood	5+	Zoologist	Survey
Brad Maryan	20+	Senior Zoologist	Survey and remote equipment collection
Dylan Goldspink	5+	Graduate Zoologist	Finalised survey and remote equipment collection

2.2.2 Guiding documents and data collection

The survey methodology and data collection GHD employed was consistent with relevant aspects of:

EPA Technical Guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment (EPA2020)

– Survey guidelines for Australia's Threatened Mammals (Commonwealth of Australia, 2011)

– Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo (*Zanda latirostris)* Baudin's cockatoo (*Zanda baudinii)* Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso)* (Commonwealth of Australia, 2022). At the time of the survey the 2022 guidelines were most current.

Field data collection for the biological survey was undertaken using Global Positioning System (GPS) enabled Samsung tablets using electronic forms in Collector and tailored to IBSA spatial data requirements. Data was synced to the cloud at the conclusion of each field day. GPS devices were used to capture survey effort (track logs). Field photographs were stored and where applicable have been provided as part of the deliverables.

2.2.3 Pre-clearance fauna survey

GHD Zoologists undertook fauna surveys, targeting the conservation significant fauna identified as likely to occur in the Myara North region (GHD 2021). From this work thirteen conservation significant fauna species were identified as known to occur (i.e. recorded) in the region. These thirteen recorded species are the focus of the pre-clearance survey and are:

- Chuditch (*Dasyurus geoffroii*) – Vulnerable
- Quokka (*Setonix brachyurus)* – Vulnerable
- Water Rat, Rakali (*Hydromys chrysogaster*) – Priority 4
- Western False Pipistrelle (*Falsistrellus mackenziei*) – Priority 4
- South-Western Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *wambenger*) – Conservation Dependent
- Western Brush Wallaby (*Notamacropus irma*) – Priority 4
- Quenda (*Isoodon fusciventer*) – Priority 4
- Masked Owl (*Tyto novaehollandiae novaehollandiae)* – Priority 3
- Peregrine Falcon (*Falco peregrinus*) – Other Specially Protected
- Carnaby's Cockatoo (*Zanda latirostris*) - Endangered
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) - Vulnerable
- Baudin's Cockatoo (*Zanda baudinii*) - Endangered
- Southern Death Adder (*Acanthophis antarcticus*) – Priority 3

The survey area was traversed on foot and where appropriate vehicle to identify and record signs of significant fauna and presence of suitable habitat and habitat features. Specifically, this included the assessment of hollow-bearing trees with respect to Black Cockatoos and other conservation significant mammals (i.e. Western False Pipistrelle and Brush tailed Phascogale), and inspection of suitable ground habitat features (e.g. hollow fallen logs) with respect to Chuditch, Western Brush Wallaby and Quenda. The survey also included the deployment of remote cameras across suitable habitat to confirm mammal occupation. The survey effort including staff GPS tracklogs, and remote camera locations have been mapped in Figure 2, Appendix A.

Habitat tree assessment

Visual inspections of relevant suitable habitat features (i.e. tree hollows) suitable for the target significant fauna species including the Western False Pipistrelle, Brush-tailed Phascogale and Masked owl was undertaken and mapped.

Diurnal searches

The survey area was traversed on foot, in a continuous transect through the survey area, to identify suitable habitat, and habitat features suitable for use by significant fauna species. Where the survey area increased in size, transects were undertaken at approximately 50 m apart to search the area adequately. Diurnal searches of potential shelter/ denning sites for significant species (i.e logs for Chuditch) and dense vegetation (i.e. suitable for Quenda) dictated the deployment of remote cameras in these areas to confirm use by the species.

Diurnal searches also detect fauna through identification of secondary evidence, in the form of scats, tracks, feathers, diggings, and burrows.

Remote cameras

Remote cameras (Reconyx-Hyperfire ® and Reconyx-Pro ®) were deployed in suitable habitat to detect relevant target significant fauna, including Damplands and Drainage lines (Bullich, Flooded Gum, Melaleuca), Granite outcrops, Jarrah-Marri Forest, and Sheoak dominated patches of Jarrah-Marri Forest. Cameras were baited with universal animal bait (a combination of peanut butter, oats and sardines) to attract fauna species within the survey area. For each camera location the number of nights deployed, and the GPS coordinates were recorded. Cameras were used in this instance to supplement other trapping techniques.

The camera placement was altered to maximise possibility of capture for certain significant fauna. In Sheoak dominated forest, cameras would be placed facing a tree trunk in order to target South-western Western Brush-tailed Phascogale, as they are arboreal. Cameras targeting Chuditch and Western Brush Wallaby were placed on the ground or on fallen logs in Jarrah-Marri Forest for these species. Cameras were placed in damplands and drainage lines to target Quokka, Quenda, and Water Rat. Although not present in the survey area, Granite outcrops would be the target habitat for the Southern Death Adder.Data from the cameras were downloaded to a computer and manually analysed for the presence of fauna following the field survey.

A total of sixteen remote cameras were deployed in the survey area and remained between the 20th February and 21st March. In total, 30 trap nights were recorded over the survey.

All remote cameras have been mapped on Figure 2, Appendix A. and data presented in Appendix C.

Fauna species identification

Identification of fauna species was made in the field using available field guides and electronic guides (e.g. Morcombe 2004, Menkhorst and Knight 2010, Neville 2013 and Wilson and Swan 2020). Where identification was not possible, photographs of specimens were collected to be later identified. The Chuditch recorded on camera were analysed using spot arrangement as per Hohnen et al (2012) for the purposes of identifying and counting the number of individuals. The results of this analyses is presented in Appendix C.

Fauna nomenclature

Nomenclature used in this report for all faunal groups follows that used by the Western Australian Museum and the DBCA NatureMap database (DBCA 2007–).

2.2.4 Black Cockatoo tree assessment

A targeted Black Cockatoo tree assessment was undertaken in conjunction with the pre-clearance survey. The survey was carried out in accordance with the Referral guideline for 3 WA threatened black cockatoo species:: Carnaby's Cockatoo (*Zanda latirostris*) Baudin's cockatoo (*Zanda baudinii*) Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Commonwealth of Australia, 2022). The assessment included:

– Survey of hollow bearing trees for signs of use or suitability for use at ground-level, including photography, coordinates, tree diameter at breast height (DBH), estimated hollow height-from-ground/ entrance sizeand location
– Verification of GHD (2021) assessment of foraging and roosting habitat within the survey area
– Recording of foraging evidence and visual or aural observation of black cockatoos.

Hollow suitability for Black Cockatoo breeding is assessed using parameters based on studies conducted and adopted by Johnstone and Storr (1998) and Groom (2011). On average, Carnaby's Cockatoos are known to nest in hollows with an entrance diameter greater than 20 - 30 cm (Johnstone and Storr 1998; Groom 2011). While the Forest Red-tailed Black Cockatoo is known to nest in hollows with an entrance of greater than 12 cm (Johnstone and Storr 1998).

In addition to the hollow diameter, the presence of chewing around the hollow or other evidence of use, such as feeding evidence on the ground provides an indicator of a suitable and potentially used or currently used hollow. The general accessibility of a hollow is also assessed in the field, as branches can sometimes be covering hollows, or hollows may be occupied by other bird species (Corrella or Galah) or bees.

2.3 Limitations

2.3.1 Field survey limitations

The EPA (2020) Technical Guidance states that fauna survey reports for environmental impact assessment in WA should contain a section describing the limitations of the survey methods used. The limitations and constraints associated with this field survey are discussed in Table 4. Based on this assessment, the survey effort has not been subject to any constraints, which affect the thoroughness of the assessment or conclusions formed.

Table 4 Field survey limitations

Aspect	Constraint	Comment
Sources of information and availability of contextual information.	Nil	Contextual information was derived from previous studies and desktop assessment completed by GHD (2021) with relevance to the survey.

Aspect	Constraint	Comment
Scope (what life forms were sampled etc.)	Nil	Terrestrial vertebrate fauna were sampled during the survey.
Proportion of fauna collected and identified (based on sampling, timing and intensity)	Nil	A pre-clearance fauna (or targeted fauna) survey was conducted over two periods (20th – 25th February 2023 and 20th – 23rd March 2023). As the survey targeted suitable habitats using cameras, mammals are expected to have been captured during this time, and seasonality would not have impacted the results with this method. The target species were captured using the cameras. Eight survey days and 16 person days were employed for the surveys. A total of 17 cameras were deployed over the survey area and remained between the 20th February and 21st March. In total, 30 trap nights were recorded over the survey. Of the fauna species recorded during the survey, all were identified to species level.
Completeness and further work which might be needed (e.g. was the relevant area fully surveyed)	Nil	The survey area was accessed by vehicle and on foot. The survey area was adequately surveyed during the field survey in line with the scope.
Mapping reliability	Minor	No habitat mapping was undertaken for the survey. The survey was conducted using high-resolution aerial imagery obtained from Landgate, topographical features, previous vegetation mapping (Mattiske and/or Beard) and field data. Data was recorded in the field using hand-held GPS tools (e.g. Samsung tablet, and Garmin GPS). Certain atmospheric factors and other sources of error can affect the accuracy of GPS receivers, including tree canopies. The Garmin GPS units used for this survey are accurate to within ±5 metres on average, therefore the data points consisting of coordinates recorded from the GPS may contain minor inaccuracies.
Timing/weather/ season/cycle	Nil	The field survey was undertaken in February – March. In the four months prior to the survey (November 2022 – February 2023), the Jarrahdale (#9023) radar (BoM 2023) recorded 46.4 mm rainfall. This is below the long-term average rainfall for the same period (83.1 mm). The conditions during the survey were clear, with no rainfall. The nearest weather station for temperature data is Karnet (#9111) A summary of the climatic conditions are provided for February: - Daily maximum temperature: 35.2 °C - Daily minimum temperature: 24.0 °C - Daily rainfall: 0.2 mm The weather conditions did not appear to impact the results of the survey. Rainfall and cold conditions can impact fauna detectability. It would also have reduced the accessibility and time available to survey, if rainfall were to exceed the threshold for a stop-work.
Disturbances (e.g. fire, flood, accidental human intervention)	Nil	Historical and ongoing clearing is present in the survey area. This disturbance did not impact the survey effort and aim of the survey. Fauna that are present in the area and potentially utilising the remaining uncleared habitat are detectable, or a reasonable likelihood is placed on their occurrence through the distinction of available habitat for these species, noted in the field, if they are not detected during the field survey.
Intensity (in retrospect, was the intensity adequate)	Nil	The survey area was sufficiently covered by the field staff. Walk transects covering the entire length of the survey area, was conducted, which is considered adequate for the survey requirements. As the survey area was narrow, the survey team were able to visibly inspect all the fauna habitat present within the survey timeframe through walk transects.
Resources	Nil	Adequate resources were employed during the field survey. Eight survey days and 16 person days were spent undertaking the

Aspect	Constraint	Comment
		survey utilising 3 experienced zoologists. The entirety of the survey area was walked through transects, and a team of two allows for suitable coverage to visibly inspect the approximately 100 m wide corridor, as the team walk apart at a distance to record information across the corridor.
Access restrictions	Nil	All areas were able to be accessed during the survey.
Experience levels	Nil	The relative experience levels of the junior zoologists are 5 years, and the senior zoologist is 20 plus years.

3. Desktop assessment

3.1 Previous surveys

GHD (2021) Myara North Terrestrial Fauna Survey and Black Cockatoo

GHD (2021) conducted a Terrestrial Vertebrate Fauna Survey and Black Cockatoo Habitat Assessment in the Myara North region for Alcoa's Huntly Mine expansion. The survey was located in Jarrahdale State Forest and bordered Jarrahdale town and Serpentine National Park to the west, Modnadnocks Conservation Park to the east, and the existing Myara mine region to the south. The survey area covered approximately 18,000 ha.

The 2021 survey included a desktop assessment, a consolidation of previous fauna studies, and a detailed and targeted vertebrate fauna survey undertaken in the Myara North region in winter (June/July) and spring (November) of 2020. The Survey included a black cockatoo habitat assessment in accordance with Revised Draft referral guidelines for three threatened black cockatoo species (Commonwealth of Australia, 2017), and a targeted assessment of Carter's Freshwater Mussel.

The survey area recorded eight broad fauna habitat types: Bullich forest, Granite outcrop, Blackbutt forest, Flooded Gum woodland, Jarrah -Marri forest, Melaleuca dampland. Mine rehabilitation and Pine plantation. Jarrah-Marri forest was the predominant habitat type, consisting of 83% of the survey area. A small portion of the survey area comprised rural cleared land.

The conservation value of each fauna habitat type is specific to the locally occurring conservation significant fauna species and the type of usage by those species. All three Black Cockatoos were recorded primarily throughout the Marri-Jarrah forest, however all habitat types will be utilised for foraging by either one or all of the species. Melaleuca Damplands and riparian areas comprising Bullich Forest, Blackbutt Forest and Marri-Jarrah Forest support a Quokka population with records scattered throughout the Survey Area. Chuditch are wide ranging and expected to use all habitat types at a relatively low density.

In total 13 conservation significant species were recorded in the survey area including the Quokka, Chuditch, Brush-tailed Phascogale, Western Brush Wallaby, Forrest Red-tailed Black Cockatoo, Baudin's Cockatoo, Carnaby's Cockatoo, Western False Pipistrelle, Southern Death Adder, Quenda, Rakali, Masked Owl and Peregrine Falcon. All species identified are likely to have significant populations (number of individuals) and key habitat present within the survey area.

With regard to migratory shorebirds, the survey area lacks open water including shallow shorelines for foraging habitat. The creek lines and vegetated dampland areas within the survey area are not suitable for migratory shorebirds.

Carter's Freshwater Mussel was targeted during the survey, but it was not recorded. This is expected given that the streams are seasonal, and dry up for several months of the year. The species is known to reside in the Serpentine Dam downstream and while mussels may disperse upstream from the Dam during winter/spring flows, the dispersing mussels are unlikely to survive the extended dry period and significant populations are unlikely within the survey area.

The DBCA NatureMap search identifies that 192 vertebrate fauna taxa previously recorded within 20 km radius of the survey area. This total included 30 mammals, 115 birds, 35 reptiles and 12 amphibians.

The detailed and targeted program recorded 132 vertebrate fauna species utilising the survey area, including 23 mammals, 76 birds, 26 reptiles and seven amphibians. Of these, eight introduced species (mammals and birds) were identified. Based on the database search, the program produced good diversity of species for the survey area. It is likely that a different suite of faunal groups would be present in other times in the year (e.g. amphibians in autumn and seasonally moving species).

The location of previously recorded suitable DBH Black Cockatoo trees recorded by GHD (2021) either in the survey area or nearby have been mapped in Figure 4, Appendix A. This represents survey effort in the area and provides an indication of potential impact to trees for the current alignment (survey area).

4. Results

4.1 Significant fauna

Six significant fauna species were recorded within the survey area during the surveys. These are:

– Baudin's Cockatoo (*Zanda baudinii*) – listed as Endangered under the BC Act and Endangered under the EPBC Act.
– Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) listed as Vulnerable under the BC Act and Vulnerable under the EPBC Act.
– Chuditch (*Dasyurus geoffroii*) listed as Vulnerable under the BC Act and Vulnerable under the EPBC Act.
– Quenda (*Isoodon fusciventer*) – listed as Priority 4 by the DBCA.
– Western Bush Wallaby (*Notamacropus irma*) – listed as Priority 4 by the DBCA.
– South-Western brush-tailed phascogale (*Phascogale tapoatafa wambenger*) – listed as Conservation Dependent by the DBCA.

All locations of these fauna (camera results and visual observations/secondary evidence) and trees suitable for use by significant fauna, have been mapped on Figure 3, Appendix A with raw data presented in Appendix C.

Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso)

Forest Red-tailed Black Cockatoos were recorded at 6 locations throughout the survey area with approximately 6 physical flock observations recorded during the survey. Individuals were observed in flight, feeding or calling throughout the areas assessed. The location of these sightings are presented in Figure 4, Appendix A and in Appendix C.

Baudin's Cockatoo (Calyptorhynchus baudinii)

Baudin's Cockatoo has been recorded breeding in both the Myara and Myara North regions, though only in low numbers. Most breeding appears to be in the Solus Road area at the border of the Myara and Myara North regions (Alcoa, T. Kirkby unpublished data).

Baudin's Cockatoo were recorded in flight, feeding and calling throughout the survey area. In total Baudin's Cockatoo were recorded at 10 locations, with 3 physical flock observations recorded during surveys. Individuals were observed in flight, feeding or calling throughout the areas assessed. The location of these sightings are presented in Figure 4, Appendix A and in Appendix C

Quenda (Isoodon fusciventer)

The Quenda was recorded at one location within the survey area via remote camera (see Plate 1). Camera B1 is located in the small portion of the survey area alignment in the southwest of the survey area. Habitat preference tends to be associated with areas of low dense vegetation along drainage lines and damplands. The camera which recorded the Quenda was setup in Blackbutt forest, which was nearby a drainage line. The location of the Quenda are presented in Figure , Appendix A and in Appendix C.

Plate 1: Quenda captured on camera during Pre-clearance survey

Chuditch (Dasyurus geoffroii)

During the field survey Chuditch were recorded on 4 remote camera devices (Plate 2). The location of these records is on Figure 3, Appendix A. Image assessments were conducted, by analysing camera trap images of individuals using the unique pattern and spots each individual displays (see Appendix C). This assessment identified that 9 different individuals were recorded in the survey area. This included 5 individuals recorded on Camera 11, one individual recorded on Camera 42, one individual on Camera “no name” and two individuals on Camera 43. There is a degree of uncertainty surrounding Chuditch 5, as the images do not show the full spot pattern for that individual, suggesting it could be Chuditch 1, as it has a similar pattern.

Nine individuals is a high number and may represent that the survey area is within several individual’s home-ranges and that suitable breeding and foraging habitat is available. GHD (2021) states that *the survey area contains suitable breeding and foraging/hunting habitat to support the species and a population.* This distinction can be made for the results in the pre-clearance survey, especially as only two camera captures of the Chuditch were recorded by GHD in 2021 and extensive targeted cage trapping was undertaken for the species, with no trapped individuals. (GHD 2021).

Plate 2: Chuditch captured on camera during Pre-clearance survey’

Western Brush Wallaby (Notamacropus irma)

Western Brush Wallaby were recorded throughout much of the survey area with a total of 11 observations of individuals (predominantly opportunistic) recorded during the surveys. Sightings occurred mainly amongst the Jarrah-Marri Forest, the dominant fauna habitat type, and were more prevalent in the southern and central portions of the survey area. The location of these records is on Figure 3, Appendix A.

South-Western Brush-Tailed Phascogale (Phascogale tapoatafa wambenger)

During the field survey The South-Western Brush-tailed Phascogale was recorded on one remote camera (Plate 3) at one location in the Jarrah/Marri forest habitat in the survey area (Figure 3, Appendix A). Trees identified as suitable for use by this species (containing suitable hollows) were identified in the survey area. A total of 16 trees, containing 23 hollows were observed as suitable for this species. This total included 12 Jarrah trees, and 4 Marri. These trees are presented on Figure 3, Appendix A.

Plate 3: South-Western Brush-tailed Phascogale captured on camera during Pre-clearance survey

Masked Owl (Tyto novaehollandiae novaehollandiae)

The Masked Owl has been previously recorded with acoustic recorders at Myara North near Serpentine Dam (GHD 2021). One tree hollow in a Jarrah tree was identified as suitable for the Masked Owl in the survey area (Figure 3, Appendix A and Appendix C). This species was not recorded during the survey. Nocturnal surveys or bird acoustic recorders would be required to detect this species.

4.2 Black Cockatoo tree assessment

The location of suitable DBH trees for all Black Cockatoo species, identified in the survey area have been mapped in Figure 4, Appendix A and provided in tabular format in Appendix C.

The survey area was observed to be dominated by Forest Red-tailed Black and Baudin's Cockatoo, while Carnaby's Cockatoo's were not observed at the time of the survey.

Transect data recorded within the survey area identified Jarrah as the dominant tree species supporting breeding habitat, followed by Marri and Blackbutt (Figure 4, Appendix A) represented by the yellow and labelled symbols. Both the composition and relative number of habitat trees per hectare is likely dictated by dual factors; including historic logging practices and deliberate felling of Marri to provide better resources to promote faster growth to Jarrah timber assets. Habitat tree counts (trees identified with potential breeding suitability (i.e. containing hollows)) in the survey area comprise of 15 Jarrah, 9 Marri, and 1 Blackbutt (25 habitat trees in total). The total number of suitable hollows recorded for Black Cockatoos is 33. The hollows were assessed as suitable as they were the appropriate size, and were accessible (not occupied by bees or other birds and no branches in front of entrance).

Breeding activity has been recorded at Myara North in the past for Forest Red-tailed Black Cockatoos, Baudin's Cockatoo and Carnaby's Cockatoo (GHD, 2021). The pre-clearance survey recorded hollows suitable for breeding for Black Cockatoo, and evidence of use (chew marks around hollow) at 8 of the 33 hollows identified (Appendix C). Three of these hollows were in Marri, and the remaining 5 were in Jarrah. The trees are labelled in Figure 4, Appendix A with an identifying number that is provided in the table in Appendix C.

In total 12 foraging sites were recorded consisting of 7 Baudin's Cockatoo and 5 Forest Red-tailed Black Cockatoo sites. These sites are mapped on Figure 3, Appendix A. Throughout the survey area foraging quality was observed medium to high quality, depending on habitat type and the requirements for each cockatoo species. The areas

representing high quality foraging habitat consist of primary foraging species including Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Blackbutt (*Eucalyptus patens*), Sheoak (*Allocasuarina fraseriana*), Bull Banksia (*Banksia grandis*), and Snottygobble (*Persoonia longifolia*).

No roosting sites were recorded within the survey area. Additionally, no evidence of roosting was observed. It is likely roost locations may be present within or nearby the survey area, for both Baudin's Cockatoo and Forest Red-tailed Black Cockatoo with moderate flock numbers of up to 20 individuals observed flying over the survey area.

5. Conclusion

The pre-clearance survey targeted thirteen significant fauna species known or considered likely to occur in the survey area as per GHD (2021). Six of these significant fauna species were recorded within the survey area during the Autumn surveys. Three of these species, Chuditch (*Dasyurus geoffroii*), the Quenda (*Isoodon fusciventer*), South-Western Brush-tailed Phascogale (*Phascogale tapoatafa wambenger*) were recorded on remote camera. The remaining three species, the Western Brush Wallaby (*Notamacropus irma*), Baudin's Cockatoo (*Zanda baudinii*) Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) were visually observed occupying the survey area. Secondary evidence of Black Cockatoos was recorded through foraging on Marri and Jarrah nuts.

Hollow bearing habitat trees were identified and assessed as providing suitable refugia for South-Western Brush-tailed Phascogale and Masked owl across the survey area. A total of 17 hollow bearing trees were observed to be suitable habitat trees, which includes16 trees containing hollows suitable for South-Western Brush-tailed Phascogale and one tree for the Masked owl.

Potential breeding habitat trees were identified in the survey area for Black Cockatoos. A total of 25 suitable trees were identified in the survey area, containing a total of 33 hollows. A total of 8 hollows with evidence of use by Black Cockatoos (chew marks around hollow) were recorded in the survey area. Three of these hollows were in Marri, and the remaining 5 were in Jarrah.

In line with GHD's (2021) assessment, no evidence of Woylie (*Bettongia penicillata ogilbyi*) or Numbat (*Myrmecobius fasciatus*) were observed during the survey. These species have the potential to occur, although unlikely. Scattered Woylie populations may be found throughout the Jarrah forest in the southwest corner of WA. Extant naturally occurring populations of the species are restricted to three small wheatbelt reserves – Dryandra Woodland, Tutanning Nature Reserve and Perup Forest. However, GHD recently recorded the Woylie at the O'Neil survey area, which is approximately 20 km southeast of the Myara North survey area. The Myara survey area has received much more disturbance than the O'Neil area, in the form of clearing, and may be impacting the presence of this species. The suitability of habitat (dense myrtaceous shrubland and thickets of the plant *Gastrolobium*) for Woylie in the survey area is limited.

The only remaining original subpopulations for the Numbat are at Dryandra Woodland and the Upper Warren area (including Tone Perup Nature Reserve, Greater Kingston National Park and adjoining State Forest). and preferred habitat being outside the region. There was however a camera record of a single individual at Boddington recorded in 2021 by a landholder, which is approximately 50 km away from the extant populations, and an additional 50 km from the Myara survey area. It is highly unlikely the Numbat are utilising the survey area based on known distribution, and the existing habitat clearing/disturbance at Myara, as Numbats require large areas with sufficient densities of termites present in logs/hollows for food, and hollow logs, tree hollows, burrows and branches for shelter.

GHD (2021) recorded the Quokka on camera in Phase 1 and Phase 2 of the survey at 16 locations across the survey area. GHD determined the species is likely widespread in the area but are limited to areas of dense vegetation associated with drainage lines and damplands. No evidence of Quokka was recorded during the 2023 survey at Myara North, however, previous records from GHD (2021) are close to the area and Quokka is likely to occur. This is particularly in the southern arm of the haul road network, where it crosses the drainage line (from the Serpentine Reservoir) running northwest – east, and in the centre of the network, just south of the Myara North Facilities area, where it intersects a few drainage lines. GHD (2021) recorded Quokka near these areas.

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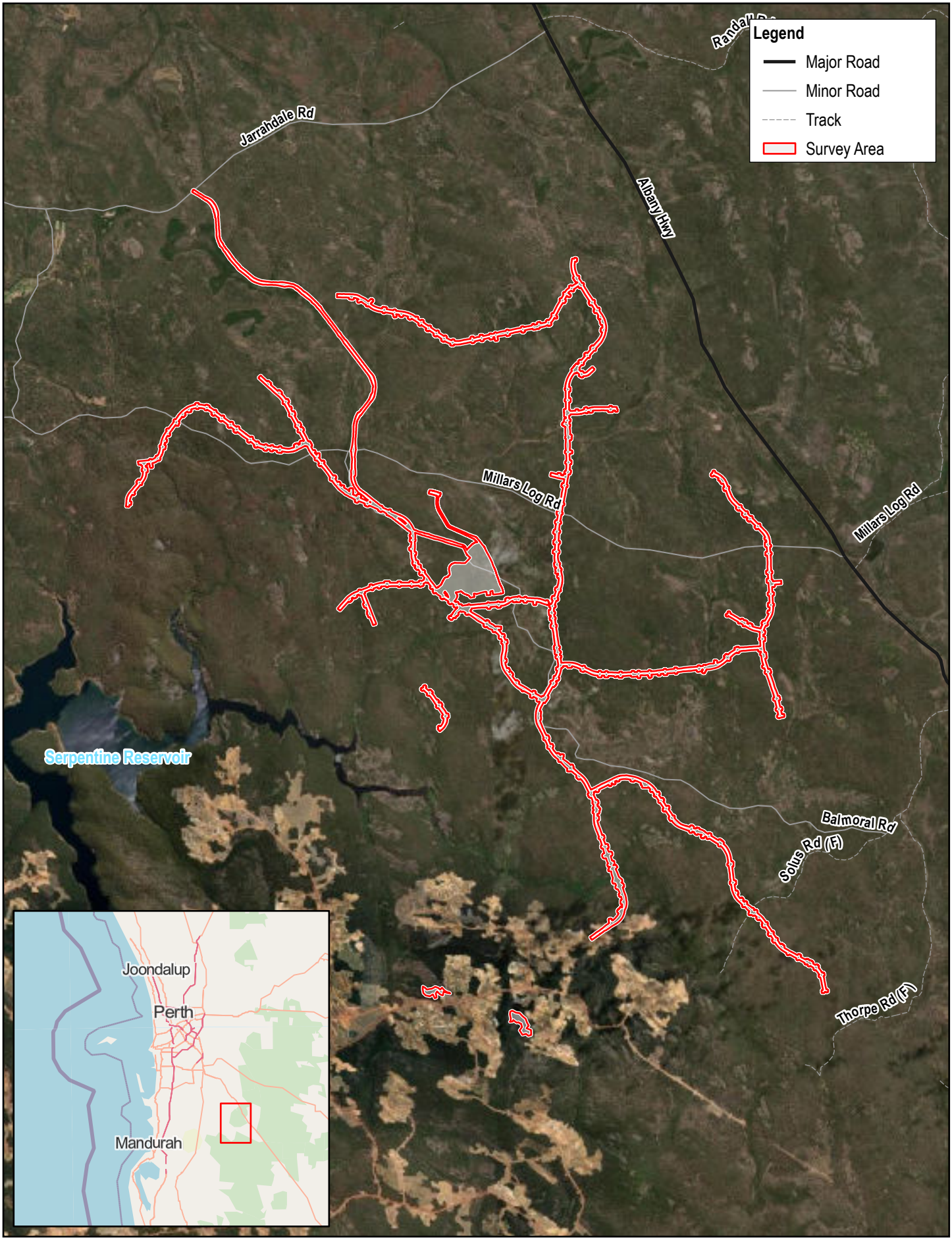
Appendices

Appendix A

Figures



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GHD

Alcoa
Myara North 2022/23 Pre Clearance Surveys

Project No. **12592293**
Revision No. **0**
Date **4/10/2023**

Project Location

FIGURE 1

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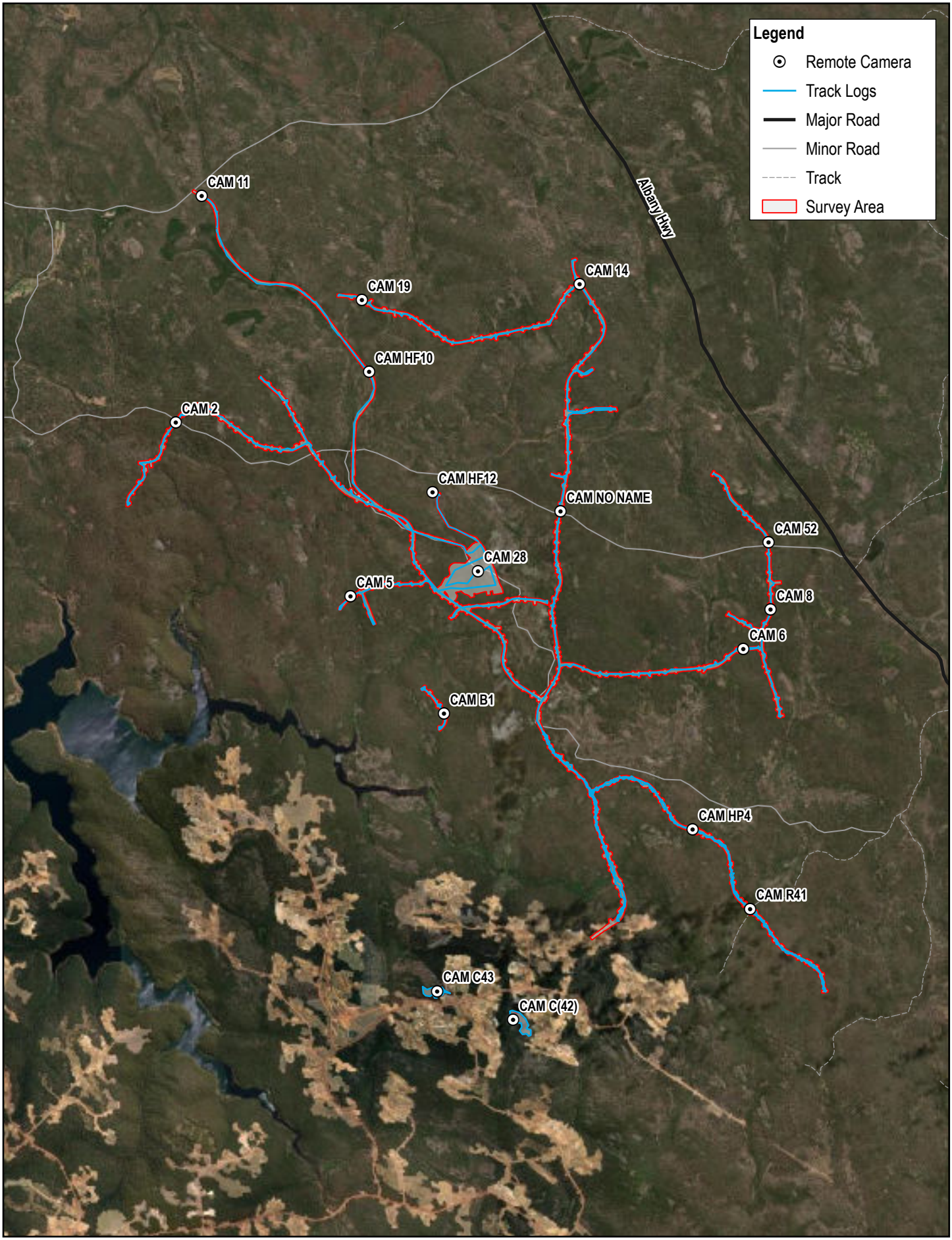

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GHD

Alcoa
Myara North 2022/23 Pre Clearance Surveys

Project No. **12592293**
Revision No. **0**
Date **4/10/2023**

Survey Effort

FIGURE 2

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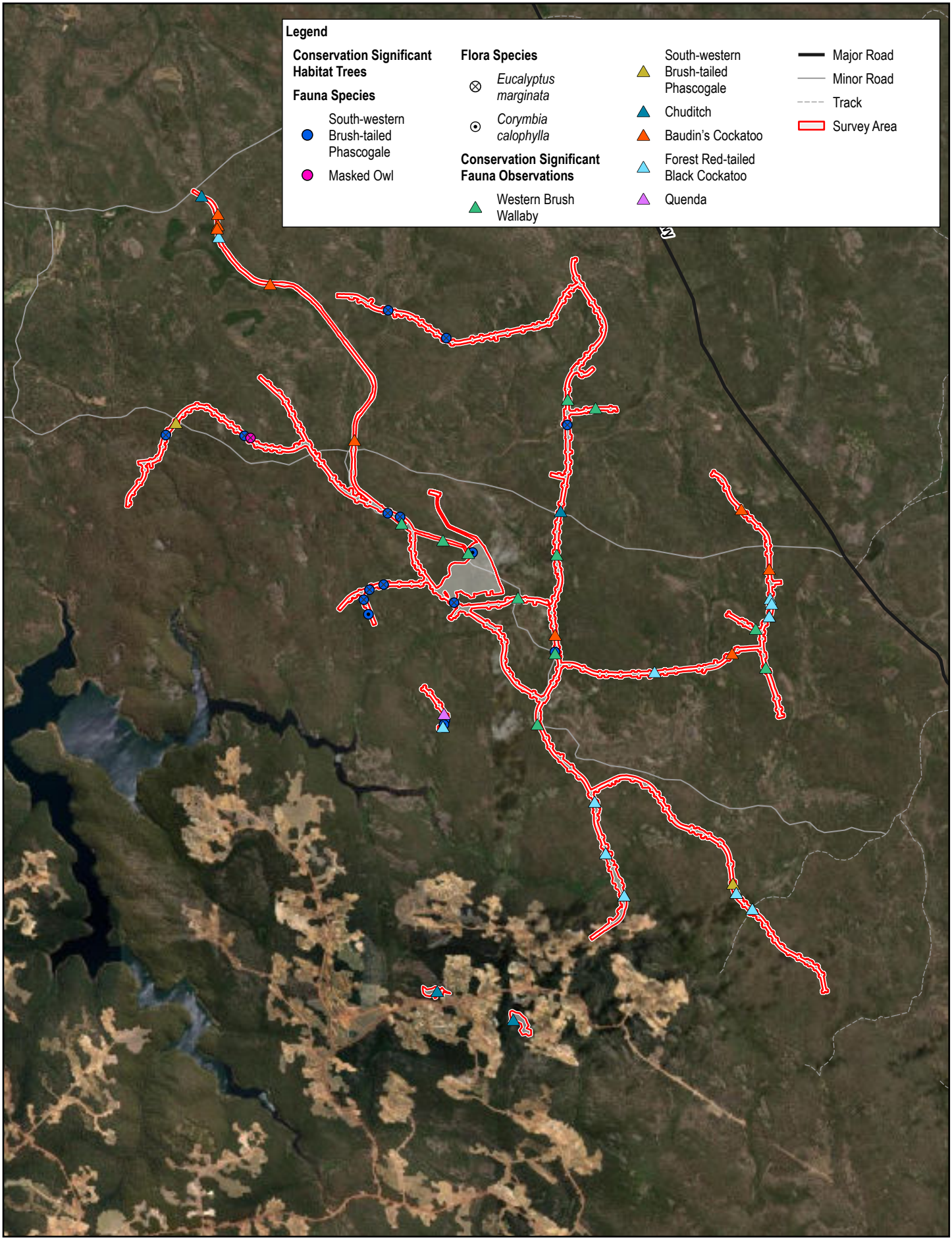

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Alcoa
Myara North 2022/23 Pre Clearance Surveys

Project No. **12592293**
Revision No. **0**
Date **4/10/2023**

Significant Fauna Locations

FIGURE 3

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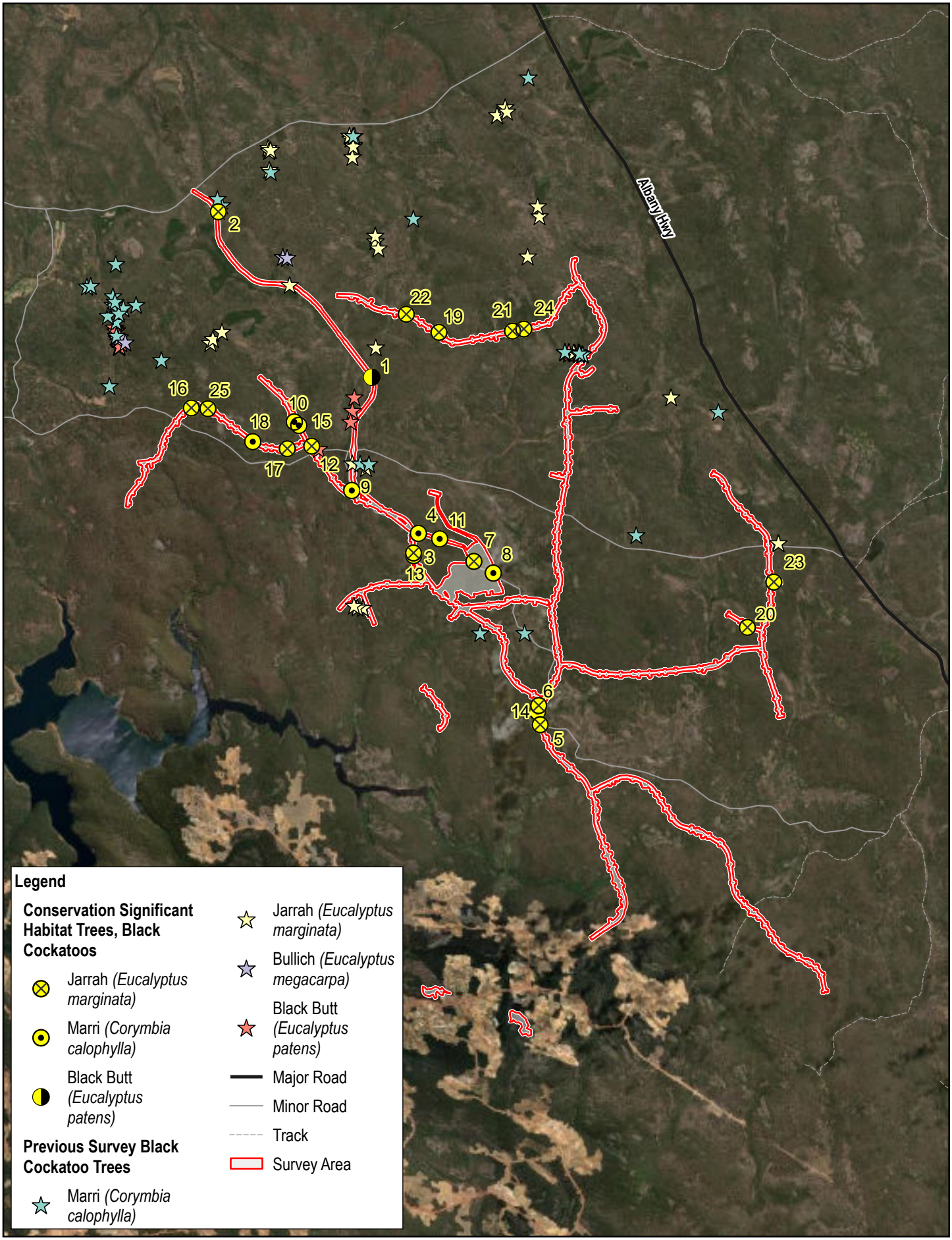

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N

GHD

Alcoa
Myara North 2022/23 Pre Clearance Surveys

Project No. **12592293**
Revision No. **0**
Date **4/10/2023**

Black Cockatoo Assessment

FIGURE 4

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Appendix B

Relevant legislation, background information and conservation codes

Relevant legislation

Federal *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Federal Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, which are defined in the EPBC Act as Matters of National Environmental Significance (MNES).

The biological aspects listed as MNES include:

– Nationally threatened flora and fauna species and ecological communities
– Migratory species

A person must not undertake an action that has, will have, or is likely to have a significant impact (direct or indirect) on MNES, without approval from the Federal Minister for the Environment.

The EPBC Act is administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

State *Environmental Protection Act 1986*

The *Environmental Protection Act 1986* (EP Act) is the primary legislative Act dealing with the protection of the environment in Western Australia. The Act allows the Environmental Protection Authority (EPA), to prevent, control and abate pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing. Part IV of the EP Act is administered by the EPA and makes provisions for the EPA to undertake environmental impact assessment of significant proposals, strategic proposals and land use planning schemes.

The Department of Water and Environment Regulation (DWER) is responsible for administering the clearing provisions of the EP Act (Part V). Clearing of native vegetation in Western Australia requires a permit from the DWER, unless exemptions apply. Applications for clearing permits are assessed by the Department and decisions are made to grant or refuse the application in accordance with the Act. When making a decision the assessment considers clearing against the ten clearing principles as specified in Schedule 5 of the EP Act:

1. Native vegetation should not be cleared if it comprises a high level of biodiversity.
2. Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significance habitat for fauna indigenous to Western Australia.
3. Native vegetation should not be cleared if it includes, or is necessary, for the continued existence of rare flora.
4. Native vegetation should not be cleared if it comprises the whole or part of native vegetation in an area that has been extensively cleared.
5. Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
6. Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
7. Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
8. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
9. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

10. Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Exemptions for clearing include clearing that is a requirement of a written law or authorised under certain statutory processes (listed in Schedule 6 of the EP Act) and exemptions for prescribed low impact day-to-day activities (prescribed in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004); these exemptions do not apply in environmentally sensitive areas (ESAs).

State *Biodiversity and Conservation Act 2016*

The *Biodiversity Conservation Act 2016* (BC Act) provides for the conservation and protection of biodiversity and biodiversity components, as well as the promotion of the ecologically sustainable use of biodiversity components in Western Australia. The BC Act replaces both the repealed *Wildlife Conservation Act 1950* (WC Act) and the *Sandalwood Act 1929* (Sandalwood Act), as well as their associated regulations. To attain the objectives of the BC Act, principles of ecological sustainable development have been established:

– Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
– If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
– The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
– The conservation of biodiversity and ecological integrity should be a fundamental consideration indecision-making
– Improved valuation, pricing and incentive mechanisms should be promoted.

The BC Act is administered by the Department of Biodiversity Conservation and Attractions (DBCA).

State *Biosecurity and Agriculture Management Act 2007*

The *Biosecurity and Agriculture Management Act 2007* (BAM Act) and associated regulations are administered by the Department of Primary Industries and Regional Development (DPIRD) and replace the repealed *Agriculture and Related Resources Protection Act 1976.* The main purposes of the BAM Act and its regulations are to:

– Prevent new animal and plant pests (vermin and weeds) and diseases from entering WA
– Manage the impact and spread of those pests already present in the state
– Safely manage the use of agricultural and veterinary chemicals
– Increased control over the sale of agricultural products that contain violative chemical residues.

The Western Australian Organism List (WAOL) provides the status of organisms which have been categorised under the BAM Act. A Declared Pest is a prohibited organism or an organism for which a declaration under Section 22(2) of the Act is in force. Declared Pests may be assigned a control category including: C1 (exclusion), C2 (eradication) and C3 (management). The category may apply to the whole of the State, LGAs, districts, individual properties or even paddocks, and all landholders are obliged to comply with the specific category of control. Categories of control are defined below.

DPIRD Categories for Declared Pests under the BAM Act

Control class code	Description
C1 (Exclusion)	Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.
C2 (Eradication)	Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.
C3 (Management)	Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.

Background information

Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the Minister for Environment under Section 51B of the EP Act. The Table below outlines the aspects of areas declared as ESA in the Environmental Protection (Environmentally Sensitive Areas) Notice 2005.

Aspects of ESAs

Aspects of Environmentally Sensitive Areas
A declared World Heritage property as defined in Section 13 of the EPBC Act.
An area that is included on the Register of the National Estate (RNE), because of its natural values, under the *Australian Heritage Commission Act 1975* of the Commonwealth (the RNE was closed in 2007 and is no longer a statutory list – all references to the RNE were removed from the EPBC Act on 19 February 2012).
A defined wetland and the area within 50 m of the wetland. Defined wetlands include Ramsar wetlands, conservation category wetlands and nationally important wetlands.
The area covered by vegetation within 50 m of rare flora, to the extent to which the vegetation is continuous with the vegetation in which the rare flora is located.
The area covered by a Threatened Ecological Community.
A Bush Forever Site listed in "Bush Forever" Volumes 1 and 2 (2000), published by the Western Australia Planning Commission, except to the extent to which the site is approved to be developed by the Western Australia Planning Commission.
The areas covered by the *Environmental Protection (Gnangara Mound Crown Land) Policy 1992*.
The areas covered by the *Environmental Protection (Western Swamp Tortoise Habitat) Policy 2002.*
The areas covered by the lakes to which the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* (EPP Lakes) applies.
Protected wetlands as defined in the *Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998*.

Reserves and conservation areas

Department of Biodiversity, Conservation and Attractions managed lands and waters

DBCA manages lands and waters throughout Western Australia to conserve ecosystems and species, and to provide for recreation and appreciation of the natural environment. DBCA managed lands and waters include national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forest and timber reserves. Access to, or through, some areas of DBCA managed lands may require a permit or could be restricted due to management activities. Proposed land use changes and development proposals that abut DBCA managed lands will generally be referred to DBCA throughout the assessment process.

Wetlands

Ramsar Wetlands (Wetlands of International Importance)

The Convention of Wetlands of International Importance was signed in 1971 at the Iranian town of Ramsar. The Convention has since been referred to as the Ramsar Convention. Ramsar Listed wetlands are "sites containing representative, rare or unique wetlands, or wetlands that are important for conserving biological diversity … because of their ecological, botanical, zoological, limnological or hydrological importance" (DAWE 2020b). Once a Ramsar Listed Wetland is designated, the country agrees to manage its conservation and ensure its wise use.

Under the Convention, wise use is broadly defined as “maintaining the ecological character of a wetland” (DAWE 2020b).

Nationally important wetlands

Wetlands of national significance are listed under the Directory of Important Wetlands in Australia. Nationally important wetlands are wetlands which meet at least one of the following criteria (DAWE 2020a):

- It is a good example of a wetland type occurring within a biogeographic region in Australia
- It is a wetland which plays an important ecological or hydrological role in the natural functioning of a major wetland system/complex
- It is a wetland which is important as the habitat for animal taxa at a vulnerable stage in their life cycles, or provides a refuge when adverse conditions such as drought prevail
- The wetland supports one percent or more of the national populations of any native plant or animal taxa
- The wetland supports native plant or animal taxa or communities which are considered endangered or vulnerable at the national level
- The wetland is of outstanding historical or cultural significance.

Vegetation extent and status

The National Objectives and Targets for Biodiversity Conservation 2001–2005 (Commonwealth of Australia 2001) recognise that the retention of 30 percent or more of the pre-clearing extent of each ecological community is necessary if Australia’s biological diversity is to be protected. This is the threshold level below which species loss appears to accelerate exponentially and loss below this level should not be permitted. This level of recognition is in keeping with the targets recommended in the review of the National Strategy for the Conservation of Australia’s Biological Diversity (ANZECC 2000).

The extent of remnant native vegetation in WA has been assessed by Shepherd et al. (2002) and the GoWA (2019), based on broadscale vegetation association mapping by Beard (various publications). The GoWA produces Statewide Vegetation Statistics Reports that are used for a number of purposes including conservation planning, land use planning and when assessing development applications. The reports are updated every 2-3 years.

Vegetation condition

The vegetation condition can be assessed in accordance with the vegetation condition rating scale for the South West and Interzone Botanical Provinces (EPA 2016a). The scale recognises the intactness of vegetation and consists of six rating levels as outlined below.

Vegetation condition rating and scale for the South West and Interzone Botanical Provinces

Condition	South West and Interzone Botanical Provinces description
Pristine	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.

Condition	South West and Interzone Botanical Provinces description
Completely Degraded	The structure of vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as ‘parkland cleared’ with the flora comprising weed or crop species with isolated native trees or shrubs.

Conservation codes

Species of significant flora, fauna and communities are protected under both Federal and State Acts. The Federal EPBC Act provides a legal framework to protect and manage nationally important flora and communities. The State BC Act is the primary wildlife conservation legislation in Western Australia. Information on the conservation codes is summarised in the following sections.

Ecological communities

Significant communities

Ecological communities are defined as naturally occurring biological assemblages that occur in a particular type of habitat (English and Blyth 1997). Federally listed Threatened Ecological Communities (TECs) are protected under the EPBC Act. The BC Act provides for the Minister to list an ecological community as a TEC (section 27), or as a collapsed ecological community (section 31) statutory listing of State TECs by the Minister. The legislation also describes statutory processes for preparing recovery plans for TECs, the registration of their critical habitat, and penalties for unauthorised modification of TECs.

Possible TECs that do not meet survey criteria are added to the DBCA Priority Ecological Community (PEC) List under Priorities 1, 2 and 3. These are ecological communities that are adequately known; are rare but not threatened, or meet criteria for Near Threatened. PECs that have been recently removed from the threatened list are placed in Priority 4. These ecological communities require regular monitoring. Conservation dependent ecological communities are placed in Priority 5. PECs are not listed under any formal Federal or State legislation, however, may be listed as TECs under the EPBC Act.

Codes and definitions for TECs listed under the EPBC Act and/or BC Act

Categories	Definition
Federal Government Conservation Categories (EPBC Act)	
Critically Endangered (CR)	An ecological community if, at that time, is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Endangered (EN)	An ecological community if, at that time: – is not critically endangered; and – is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Vulnerable (VU)	An ecological community if, at that time: – is not critically endangered or endangered; and – is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Western Australia Conservation Categories (BC Act)	
Threatened Ecological Communities	
Critically Endangered (CR)	An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.
Endangered (EN)	An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

Categories	Definition
Vulnerable (VU)	An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.
Collapsed ecological communities	
An ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time – – there is no reasonable doubt that the last occurrence of the ecological community has collapsed); or – the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover – • its species composition or structure; or • its species composition and structure. Section 33 of the BC Act provides for a collapsed ecological community to be regarded as a threatened ecological community if it is discovered in a state that no longer makes it eligible for listing as a collapsed ecological community.	

Categories and definitions for PECs as listed by the DBCA

Category	
Priority 1	Poorly known ecological communities. Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤100 ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.
Priority 2	Poorly known ecological communities. Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.
Priority 3	Poorly known ecological communities. – Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or: – communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or; – communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes. Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.
Priority 4	Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring. – Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.

Category	
	– Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. – Ecological communities that have been removed from the list of threatened communities during the past five years.
Priority 5	Conservation Dependent ecological communities. Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Other significant vegetation

Vegetation may be significant for a range of reasons other than a statutory listing. The EPA (2016a, b) states that significant vegetation may include vegetation that includes the following:

- Restricted distribution
- Degree of historical impact from threatening processes
- A role as a refuge
- Providing an important function required to maintain ecological integrity of a significant ecosystem
- Local endemism in restricted habitats
- Novel combinations of taxa
- A role as a key habitat for Threatened species or large population representing a significant proportion of the local to regional total population of a species
- Being representative of a vegetation unit in 'pristine' condition in a highly cleared landscape, recently discovered range extensions, or isolated outliers of the main range.

This may apply at a number of levels, so the unit may be significant when considered at the fine-scale (intra-locality), intermediate-scale (locality or inter-locality) or broad-scale (local to region).

Flora and fauna

Significant flora and fauna

Species of significant flora are protected under both Federal and State legislation. Any activities that are deemed to have a significant impact on species that are recognised by the EPBC Act, and/or the BC Act can warrant referral to the DCCEEW and/or the EPA.

The Federal conservation level of flora and fauna species and their significance status is assessed under the EPBC Act. The significance levels for flora and fauna used in the EPBC Act align with the International Union for Conservation of Nature (IUCN) Red List criteria, which are internationally recognised as providing best practice for assigning the conservation status of species. The EPBC Act also protects land and migratory species that are listed under International Agreements. The list of migratory species established under section 209 of the EPBC Act comprises:

- Migratory species which are native to Australia and are included in the appendices to the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals Appendices I and II)
- Migratory species included in annexes established under the Japan-Australia Migratory Bird Agreement (JAMBA) and the China–Australia Migratory Bird Agreement (CAMBA)
- Native, migratory species identified in a list established under, or an instrument made under, an international agreement approved by the Minister, such as the republic of Korea–Australia Migratory Bird Agreement (ROKAMBA)

The State conservation level of flora and fauna species and their significance status also follows the IUCN Red List criteria. Under the BC Act flora and fauna can be listed as Threatened, Extinct and as Specially Protected species.

Threatened species are those are species which have been adequately searched for and are deemed to be, in the wild, either rare, under identifiable threat of extinction, or otherwise in need of special protection, and have been gazetted as such. The assessment of the conservation status of Threatened species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria. Specially protected species meet one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection. Species that are listed as Threatened or Extinct species under the BC Act cannot also be listed as Specially Protected species.

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora or fauna.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

For the purposes of this assessment, all species listed under the EPBC Act, BC Act and DBCA Priority species are considered significant.

Categories and definitions for EPBC Act and BC Act listed flora and fauna species

Conservation category	Definition
Threatened species	
Critically Endangered (CR)	Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines". Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.
Endangered (EN)	Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines". Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.
Vulnerable (VU)	Threatened species considered to be "facing a high risk of extinction in the wild in the medium term future, as determined in accordance with criteria set out in the ministerial guidelines". Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.
Extinct species	
Extinct (EX)	Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).
Extinct in the Wild (EW)	Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).
Specially protected species	
Migratory (MI)	Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act). Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.
Species of special conservation interest (conservation dependent fauna) (CD)	Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened.
Other specially protected fauna (OS)	Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Codes for DBCA listed Priority flora and fauna

Priority category	Definition
Priority 1	Poorly-known taxa Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy

Priority category	Definition
	of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
Priority 2	Poorly-known taxa Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
Priority 3	Poorly-known taxa Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
Priority 4	Rare, Near Threatened and other taxa in need of monitoring – Rare: Taxa that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands. – Near Threatened. Taxa that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. – Taxa that have been removed from the list of threatened taxa during the past five years for reasons other than taxonomy.

Other significant flora

Flora species, subspecies, varieties, hybrids and ecotypes may be significant for a range of reasons, other than a statutory listing. The EPA (2016a, b) states that significant flora may include taxa that have/are:

– A keystone role in a particular habitat for Threatened or Priority flora or fauna species, or large populations representing a considerable proportion of the local or regional total population of a species
– Relictual status, being representation of taxonomic or physiognomic groups that no longer occur widely in the broader landscape
– New species or anomalous features that indicate a potential new species
– Being representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range)
– Unusual species, including restricted subspecies, varieties, or naturally occurring hybrids
– Local endemism (a restricted distribution) or association with a restricted habitat type (e.g. surface water or groundwater dependent ecosystems).

Other significant fauna

Fauna species may be significant for a range of reasons other than those protected by international agreement or treaty, Specially Protected or Priority Fauna. Significant fauna may include short-range endemic species, species that have declining populations or declining distributions, species at the extremes of their range, or isolated outlying populations, or species which may be undescribed (EPA 2010).

Introduced plants (weeds)

Declared Pests

Information on species considered to be Declared Pests is provided under *State Biosecurity and Agriculture Management Act 2007.*

Weeds of National Significance

The spread of weeds across a range of land uses or ecosystems is important in the context of socio-economic and environmental values. The assessment of Weeds of National Significance (WoNS) is based on four major criteria:

– Invasiveness
– Impacts
– Potential for spread
– Socio-economic and environmental values.

Australian state and territory governments have identified thirty-two Weeds of National Significance (WoNS); a list of 20 WoNS was endorsed in 1999 and a further 12 were added in 2012.

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Appendix C

Fauna Field Data

Conservation significant fauna recorded during the survey

Family	Taxa	Common Name	Status
Birds			
Cacatuidae	*Calyptorhynchus baudinii*	Baudin's black cockatoo	EN
Cacatuidae	*Calyptorhynchus banksia naso*	Red-tailed black cockatoo	VU
Mammals			
Peramelidae	*Isoodon obesulus fusciventer*	Southern brown bandicoot	P4
Macropodidae	*Notamacropus irma*	Western brush wallaby	P4
Dasyuridae	*Phascogale tapoatafa wambenger*	South-Western brush-tailed phascogale	CD
Dasyuridae	*Dasyurus geoffroii*	Chuditch	VU

Black cockatoo habitat trees supporting hollows identified within the survey area

No.	Species	DBH (mm)	No. of hollows	Hollow Entrance size (mm)	Hollow Height from ground (m)	Hollow suitability	Latitude (Lat)	Longitude (Long)	Eastings (AGD)	Northings (AGD)
1	*Eucalyptus patens*	2000	5	300	15	Potentially good.	-32.354191	116.170859	421844.4981	6419851.396
2	*Eucalyptus marginata*	900	1	300	15	Potentially quite good. Feeding evidence on Jarrah nuts.	-32.330043	116.144859	419376.5404	6422509.107
3	*Eucalyptus marginata*	900	1	450	25	Potential suitable breeding tree	-32.379702	116.177745	422514.0016	6417028.576
4	*Corymbia calophylla*	1300	1	200	20	possible very suitable, definite habitat tree. Marri nut feeding evidence.	-32.376874	116.178606	422592.5397	6417342.697
5	*Eucalyptus marginata*	1000	1	250	25	highly suitable. Chew marks on hollow. Possible breeding tree.	-32.404737	116.199166	424550.3764	6414268.437
6	*Eucalyptus marginata*	1200	1	250	20	potential suitable	-32.401955	116.198923	424525.3381	6414576.558
7	*Eucalyptus marginata*	1300	1	150	20	potential suitable	-32.38100	116.188038	423483.4956	6416892.131

No.	Species	DBH (mm)	No. of hollows	Hollow Entrance size (mm)	Hollow Height from ground (m)	Hollow suitability	Latitude (Lat)	Longitude (Long)	Eastings (AGD)	Northings (AGD)
8	*Corymbia calophylla*	1200	1	250	20	potential suitable	-32.382708	116.191349	423796.4542	6416705.158
9	*Corymbia calophylla*	1700	1	350	-	Highly suitable breeding habitat tree. Chew marks around hollow entrance.	-32.370591	116.167281	421521.9052	6418030.899
10	*Corymbia calophylla*	1400	1	250	25	Highly suitable breeding habitat tree	-32.360584	116.157548	420597.5375	6419132.985
11	*Corymbia calophylla*	1100	1	200	20	possible very suitable	-32.377693	116.182232	422934.3794	6417254.531
12	*Eucalyptus marginata*	1000	1	350	20	Highly suitable breeding habitat tree. Chew marks hollow entrance.	-32.364114	116.160495	420877.8852	6418743.862
13	*Corymbia calophylla*	1600	1	600	25	Potential suitable breeding tree	-32.380082	116.177764	422516.12	6416986.465
14	*Corymbia calophylla*	1000	1	250	15	potential suitable	-32.402844	116.198714	424506.3728	6414477.904
15	*Corymbia calophylla*	1400	1	350	25	Highly suitable breeding habitat tree. Chew marks hollow entrance.	-32.361094	116.158318	420670.4304	6419077.019
16	*Eucalyptus marginata*	1100	1	350	25	Highly suitable breeding habitat tree. Chew marks hollow entrance.	-32.358442	116.139983	418942.9504	6419357.306
17	*Eucalyptus marginata*	1000	1	250	20	Highly suitable breeding habitat tree. Chew marks hollow entrance.	-32.364454	116.156324	420485.7502	6418703.084
18	*Corymbia calophylla*	800	2	200	20	Highly likely a breeding tree, with lots of chew marks around hollow entrance	-32.36340	116.150436	419930.8495	6418815.538
19	*Eucalyptus marginata*	1000	1	250	15	possibly very suitable, definite habitat tree	-32.347769	116.182375	422922.5641	6420571.602
20	*Eucalyptus marginata*	700	1	200	15	possibly very suitable, definite habitat tree	-32.390861	116.234683	427879.1217	6415831.369
21	*Eucalyptus marginata*	1300	3	250	15	possibly very suitable, definite habitat tree	-32.347659	116.194943	424105.2971	6420592.801

No.	Species	DBH (mm)	No. of hollows	Hollow Entrance size (mm)	Hollow Height from ground (m)	Hollow suitability	Latitude (Lat)	Longitude (Long)	Eastings (AGD)	Northings (AGD)
22	*Eucalyptus marginata*	700	1	200	15	possibly very suitable, definite habitat tree	-32.345103	116.176820	422397.5438	6420863.142
23	*Eucalyptus marginata*	1100	1	200	15	possibly very suitable, definite habitat tree	-32.384309	116.239253	428303.7281	6416560.668
24	*Eucalyptus marginata*	1300	1	200	15	possibly very suitable, definite habitat tree	-32.347375	116.196876	424287.0025	6420625.659
25	*Eucalyptus marginata*	2000	2	350	25	Highly suitable breeding habitat tree. Chew marks around hollow entrance.	-32.358569	116.142814	419209.4372	6419345.361

Conservation significant fauna habitat trees supporting hollows identified within the survey area

No.	Species	Fauna species	DBH (mm)	No. of hollows	Latitude (Lat)	Longitude (Long)	Eastings (AGD)	Northings (AGD)
1	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	900	1	-32.384986	116.170172	421806.2706	6416437.302
2	*Corymbia calophylla*	South-Western Brush-Tailed Phascogale	1300	1	-32.379715	116.187828	423462.6119	6417034.422
3	*Corymbia calophylla*	South-Western Brush-Tailed Phascogale	900	1	-32.388544	116.169954	421788.8381	6416042.726
4	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	800	2	-32.384255	116.172595	422033.5382	6416520.105
5	*Corymbia calophylla*	South-Western Brush-Tailed Phascogale	1300	1	-32.394213	116.201764	424786.1414	6415436.764
6	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	600	1	-32.404028	116.182876	423017.6506	6414335.812
7	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	1800	3	-32.374465	116.175500	422298.2616	6417607.491
8	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	700	3	-32.386958	116.184605	423165.7137	6416229.207
9	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	1200	1	-32.373925	116.173390	422099.3351	6417665.815

No.	Species	Fauna species	DBH (mm)	No. of hollows	Latitude (Lat)	Longitude (Long)	Eastings (AGD)	Northings (AGD)
10	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	900	1	-32.386423	116.169182	421714.3997	6416277.28
11	*Corymbia calophylla*	South-Western Brush-Tailed Phascogale	600	1	-32.404616	116.182727	423004.1539	6414270.54
12	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	1700	1	-32.344518	116.17373	422106.2661	6420925.769
13	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	900	1	-32.361327	116.204176	424985.1535	6419084.182
14	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	1200	1	-32.348601	116.183616	423040.0508	6420480.259
15	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	900	3	-32.362538	116.149026	419797.4291	6418910.042
16	*Eucalyptus marginata*	South-Western Brush-Tailed Phascogale	800	1	-32.362337	116.135588	418532.9012	6418922.211
17	*Eucalyptus marginata*	Masked Owl	1100	1	-32.362847	116.150052	419894.2345	6418876.554

Remote camera data

Camera number	Set date	Collect date	Lat	Long	Eastings (AGD)	Northings (AGD)
CAM HF12	20/02/2023	20/03/2023	-32.37091936	116.1810785	422820.0946	6418004.548
CAM 6	20/02/2023	20/03/2023	-32.394005	116.23396	427813.6039	6415482.349
CAM 8	20/02/2023	20/03/2023	-32.38833854	116.2386881	428253.7746	6416113.626
CAM C43	20/02/2023	21/03/2023	-32.44324371	116.1812133	422894.3535	6409987.08
CAM HP4	20/02/2023	21/03/2023	-32.42005777	116.2250912	427000.3662	6412588.227
CAM 19	20/02/2023	20/03/2023	-32.34304648	116.1692912	421687.289	6421085.686
CAM NO NAME	20/02/2023	20/03/2023	-32.37382469	116.2029309	424878.3196	6417697.965
CAM B1	20/02/2023	21/03/2023	-32.40306204	116.1827424	423004.2437	6414442.776
CAM 52	20/02/2023	20/03/2023	-32.37860275	116.2384147	428220.4025	6417192.632
CAM 28	20/02/2023	20/03/2023	-32.38240987	116.1887441	423551.1627	6416736.357
CAM C(42)	20/02/2023	21/03/2023	-32.44748106	116.1941861	424117.4119	6409526.69
CAM HF10	20/02/2023	20/03/2023	-32.35344808	116.1704094	421801.5427	6419933.424
CAM 11	20/02/2023	20/03/2023	-32.32773919	116.1420485	419109.9848	6422762.371
CAM 2	20/02/2023	20/03/2023	-32.36058266	116.1373397	418696.1471	6419118.011
CAM 14	19/02/2023	20/03/2023	-32.34099404	116.2064796	425185.4319	6421339.847
CAM 5	20/02/2023	21/03/2023	-32.38592971	116.1669362	421502.736	6416330.318
CAM R41	20/02/2023	21/03/2023	-32.43165114	116.2348365	427925.8792	6411309.688

Significant fauna recorded on camera

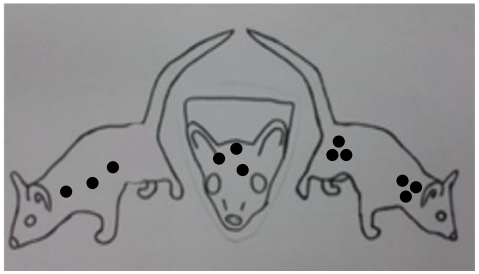
Camera No.		14	11	28	5	8	6	2	12	42	No Name	19	4	10	1	52	41	43
Common name	**Scientific Name**																	
Chuditch	*Dasyurus geoffroii*		4							1	1							2
Brushed Tailed Phascogale	*Phascogale tapoatafa wambenger*							1										
Southern Brown Bandicoot*	*Isoodon obesulus fusciventer*														1			

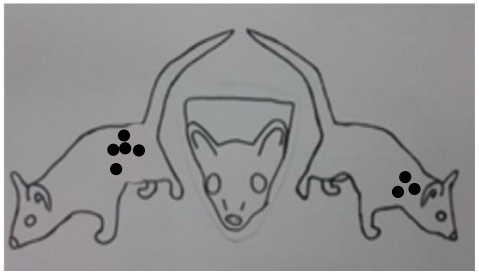
Chuditch Camera Capture (Dasyurus geoffroii) Physical Assessment data

Spot patterns of Chuditch were examined in detail and used to identify individuals from camera trap photographs. In order to use these patterns to identify individuals, accurate and proportionate sketches were made of the top of the head, back, left and right sides of individual Chuditch from the photographs taken by the remote cameras. Each sketch aimed to provide a useful summary that strongly aided subsequent recognition of individuals (Hohnen *et a*l 2015). The spot patterns were examined to determine whether the Chuditch in question was new or a previously viewed individual. Often two or more key spot patterns were visible in a photograph of a single side (e.g. one group on the shoulder and one on the haunch). When these key collections of spots could be matched and no area of the coat had con-complementary patterns, it was deemed to be the same individual. Therefore a clear view of a single side was sufficient to confirm the identify of the individual, if that individual had been previously identified. Only good quality images showing two or more clear spot patterns were used for identification and photographs with obscured or blurred patterns were not used (Hohnen *et al* 2015).

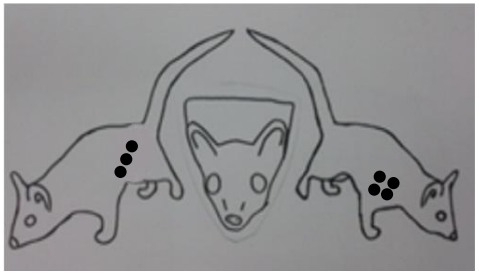
Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
Chuditch 1	CAM 11	25/02/2023	Square pattern on the left rear. Right front limb shows a small spot towards foot.		Chuditch Left Side:  Chuditch Right Side: 

Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
Chuditch 2	CAM 11	27/02/2023	Five defined spots in a straight line running from front left limb to rear left limb. Two spots creating a square among the spot line. Four dots on mid right rear with a tight triangle and an outlying defined spot.		Chuditch Left Side:  Chuditch Right Side: 
Chuditch 3	CAM 11	12/03/2023	Six defined spots on the mid right side creating two lines of three. Two defined spots on the rear left limb and two defined spots mid upper left.		Chuditch Left Side:  Chuditch Right Side:

Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
					
Chuditch 4	CAM 11	13/03/2023	Three defined spots running in a straight line from the front left limb to the mid body. Three defined spots on the rear right limb and three less defined spots behind the right ear. Three less defined spots on the head. One above the left brow, one under the right ear and one centre between both ears.		Chuditch Left Side:  Chuditch Right Side:  Chuditch Head View:

Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
					
Chuditch 5 *(Only two images captured, possibly Chuditch 1).*	CAM 11	18/03/2023	Three visible spots on head in a triangle pattern above the left eye. Four defined spots on the rear upper left limb creating a square. One less defined spot between the upper two defined spots of the square pattern.		Chuditch Head/Left View: 
Chuditch 6	CAM 42	11/03/2023	Three defined spots in a triangle on the rear left side with two smaller bludges within. Three defined spots in a tight triangle pattern behind the right ear.		Chuditch Left View:  Chuditch Right View:

Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
					
Chuditch 7	CAM No Name	12/03/2023	Four defined spots in the pattern of two separate triangle on the rear right limb. Three defined spots in a line on the rear left limb and one defined spot of the line creating a triangle.		Chuditch Right View:  Chuditch Left View: 

Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
Chuditch 8	CAM 43	22/02/2023	Three distinct spots located behind the right ear with one of the spots merging behind the ear with another. Three defined spots creating a line in the mid area and one defined spot moving to the spine.		Chuditch Right View:  Chuditch Left View: 
Chuditch 9	CAM 43	27/02/2023	Three distinct spots in a line located on the rear. Four distinct spots located on the front right limb in a square pattern.		Chuditch Left View: 

Chuditch ID	Camera ID	Date	ID marks	Spot pattern diagram	Remote camera Image
					Chuditch Right View: 

Reference

Hohnen, R, Ashby, J, Tuft, K, & McGregor, H 2012, *'Individual identification of northern quolls (Dasyurus hallacatus) using remote cameras'*, Australian Mammalogy, CSIRO Publishing. http://dx.doi.org/10.1071/AM12015.

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The Power of Commitment

Appendix 8 – Myara North Power/Water Alignments, Black Cockatoo Breeding Habitat Survey (Kirkby, 2022)

MYARA NORTH POWER/WATER/BOUNDARY ALIGNMENTS, BLACK COCKATOO BREEDING HABITAT SURVEY.

The purpose of the survey was to locate black cockatoo nests, possible nests and habitat trees at the Myara North Power/Water/Boundary alignments.

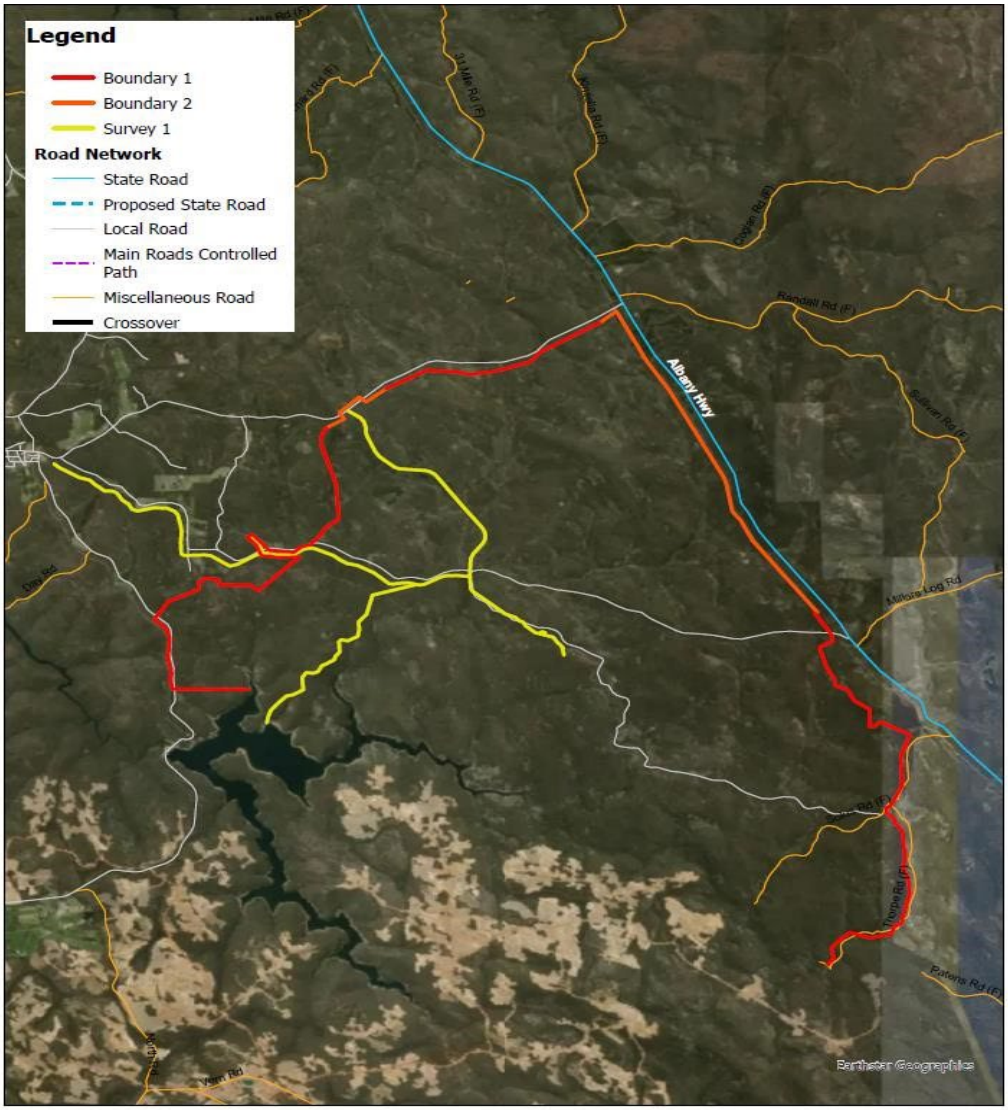

Figure 1: Myara North Black Cockatoo Survey 2023

Alcoa

Methods and timing

The areas were surveyed using Alcoa's 'Procedure for surveying haul road alignments and mine pits for black cockatoo habitat (MIN).

Trees are described as:

- Nest trees - that show signs of use by black cockatoos, including worn and chewed entrance of a suitable sized hollow (NB: it is possible some of these trees no longer provide suitable nest habitat but have either been used as nests in the past or been well prospected by cockatoos);
- Possible nest trees – that have a suitable size and shape hollow entrance but show no signs of use. During assessment of these trees, the position, entrance size and orientation of the hollow should be considered because these will influence the likelihood of a suitable depth of hollow for cockatoos;
- Habitat trees – mature marri trees (>500mm diameter) that have the potential to provide nest habitat in the future either based on:
    i) Already starting to develop a hollow; or
    ii) Tree form conducive to hollow formation/development such as elbows or major V branching of primary trunk (that may hollow out); tall, straight trunked trees, particularly showing signs of decay (that may form a top entrance hollow in the event of the top of the trunk being blown off); trees with major branches coming off the main trunk (that may hollow out if branch drops).
- Roost sites – groups of trees with evidence of roosting, e.g. bird faeces and feathers found beneath the roost trees.

Note. The above mentions Marri trees but the current surveys also include Blackbutt *Eucalyptus patens,* Bullich *E. megacarpa* and Flooded Gum *E. patens.* These species provide nest hollows but are restricted in distribution to wet areas and creeklines and are rarely encountered other than where a haul road crosses a stream zone.
Alcoa's current surveys also allow for significant stands of suitable trees (>500mm diameter) which may provide a future hollow but are not necessarily forming a hollow at present.

Jarrah and Blackbutt above 2000mm dia. and Marri above 1500mm dia. are considered 'Significant Trees' and were also noted during the survey.

Parts of the Power and Water alignments were surveyed in a previous survey (Myara North power and water alignments 22-23). This was originally a 40m corridor but was widened during the present survey to 100m. The 2022-2023 40m width was not resurveyed.

For the most part the boundary fence alignment was also surveyed to a width of 50m either side of the centreline. This was later reviewed and the fence line between Solus Rd (430934E – 6414701N) and Millars Log Rd (429291E – 6417055N) was surveyed to a 30m wide corridor.

All trees of interest were picked up using handheld GPS. AGD84.
Nest trees were marked 'H.' with white paint and tagged with a stainless-steel number tag.

The diameter of Nest Trees and Significant Trees was measured accurately while the diameter of possible nest trees was approximate.

The survey was undertaken between November 2023 to January 2024 by Tony Kirkby who has over 20 years of experience conducting black cockatoo surveys in the south-west of Western Australia.

Results

A total of 636 trees were picked up during the survey. *See spreadsheet for details*.

Tree species and number

- Marri – 441
- Bullich – 5
- Blackbutt – 179
- Jarrah – 1
- Flooded Gum - 10

Nest trees

- Marri – 20
- Blackbutt – 1
- Bullich - 2
-

Possible nest trees

- Marri – 27

Significant trees

- Marri – 2
- Blackbutt – 3
- Jarrah - 1

Roost sites

No roost sites were located during the survey.

Tony Kirkby

7th February 2024

Date	Mine	Nest_type	Tree_species	Tree_condition	Tree_diameter_dbh	Hollow_type	Hollow _u:	Bees	Camera	Nest_ID	Location	Comment	EastingAGD	NorthingAG	Protect_Status	Action	Record_no	GPS_source	Change_recorded	Ider	Status
13/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		419034	6422794			1324	Garmin		TK	
13/11/2023	Myara North	Habitat	Marri	Good	900						PW alignment		419199	6422705			1325	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419252	6422662			1327	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419247	6422666			1328	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419251	6422659			1329	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	900						PW alignment		419322	6422500			1330	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	700						PW alignment		419319	6422498			1331	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1200						PW alignment		420993	6420970			1332	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		421080	6420860			1333	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1200						PW alignment		421065	6420861			1334	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1200						PW alignment		421822	6419815			1335	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1000						PW alignment		421533	6419123			1336	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	600						PW alignment		421535	6419114			1337	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	500						PW alignment		421530	6419102			1338	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1000						PW alignment		421528	6419088			1339	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1000						PW alignment		421528	6419077			1340	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	600						PW alignment		421518	6419065			1341	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1300						PW alignment		421505	6419066			1342	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	700						PW alignment		421501	6419057			1343	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1000						PW alignment		421505	6419040			1344	Garmin		TK	
14/11/2023	Myara North	Habitat	Blackbutt	Good	1000						PW alignment		421528	6418860			1345	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		419932	6421501			1350	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		419823	6421572			1352	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1100						PW alignment		419522	6421863			1353	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		419465	6422096			1354	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		419460	6422096			1355	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419450	6422102			1357	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		419367	6422238			1358	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419367	6422293			1360	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419393	6422374			1361	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419418	6422368			1362	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	500						PW alignment		419411	6422443			1363	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	500						PW alignment		419404	6422451			1364	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	700						PW alignment		419397	6422445			1365	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419377	6422446			1366	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419375	6422450			1367	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419370	6422422			1368	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	700						PW alignment		419306	6422630			1369	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419307	6422632			1370	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		419323	6422647			1371	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419327	6422657			1372	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419279	6422680			1373	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419275	6422689			1374	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419263	6422694			1375	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		419296	6422652			1377	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		419200	6422749			1378	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	500						PW alignment		419218	6422736			1379	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419229	6422747			1380	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		419215	6422769			1381	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		415213	6420336			1383	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	700						PW alignment		415375	6420191			1384	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		415368	6420195			1385	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		415397	6420167			1388	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		415450	6419987			1389	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1100						PW alignment		416251	6419053			1390	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	600						PW alignment		416416	6418923			1391	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		416421	6418928			1392	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1000						PW alignment		416731	6418978			1393	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		416769	6419028			1394	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	900						PW alignment		417023	6419168			1395	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	800						PW alignment		417022	6419154			1396	Garmin		TK	
14/11/2023	Myara North	Habitat	Marri	Good	1100						PW alignment		416807	6419076			1400	Garmin		TK	

14/11/2023	Myara North	Habitat	Marri	Good	1100	PW alignment	416222	6419132	1402	Garmin	TK
14/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	416166	6419170	1403	Garmin	TK
14/11/2023	Myara North	Habitat	Marri	Good	1100	PW alignment	416141	6419217	1404	Garmin	TK
14/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	416137	6419218	1405	Garmin	TK
14/11/2023	Myara North	Habitat	Marri	Good	1100	PW alignment	415757	6419203	1406	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1200	PW alignment	418760	6417016	1407	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	418769	6416967	1408	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	418774	6416975	1409	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	418771	6416921	1411	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	700	PW alignment	418773	6416740	1412	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	700	PW alignment	418770	6416731	1413	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	417838	6415642	1415	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	418061	6416096	1418	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418059	6416102	1419	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418067	6416128	1420	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	418105	6416161	1422	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418123	6416170	1423	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418142	6416167	1424	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418692	6416515	1426	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	418722	6416543	1427	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418722	6416552	1428	Garmin	TK
15/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	418730	6416558	1429	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1100	PW alignment	420257	6418452	1431	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	420255	6418453	1432	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	430324	6412789	1433	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430337	6412767	1434	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	430341	6412764	1435	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	430346	6412747	1436	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	430711	6411846	1437	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	430674	6411469	1438	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 1	430679	6410130	1439	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430265	6409598	1440	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	430268	6409573	1441	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430256	6409559	1442	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	430282	6409577	1443	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	800	Boundary 1	430310	6409587	1444	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430331	6409593	1445	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	430342	6409608	1446	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430333	6409610	1447	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1400	Boundary 1	430320	6409617	1448	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430296	6409605	1449	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430300	6409605	1450	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	800	Boundary 1	430398	6409602	1452	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430400	6409637	1453	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	900	Boundary 1	430393	6409647	1454	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430481	6409638	1456	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430491	6409627	1457	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430503	6409639	1458	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430508	6409635	1459	Garmin	TK
17/11/2023	Myara North	Habitat	Flooded Gum	Good	900	Boundary 1	430499	6409640	1460	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430488	6409654	1461	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430470	6409689	1462	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	430459	6409688	1463	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	430474	6409706	1464	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	700	Boundary 1	430502	6409744	1465	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430509	6409787	1466	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	430515	6409811	1467	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430526	6409857	1468	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430654	6409912	1469	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	430661	6409902	1470	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430672	6409893	1471	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1500	Boundary 1	430709	6409968	1472	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430712	6410007	1473	Garmin	TK

17/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	430711	6410011	1474	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430668	6409955	1476	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	430643	6409929	1477	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	800	Boundary 1	430729	6410127	1478	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430746	6410120	1479	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430751	6410128	1480	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	700	Boundary 1	430747	6410186	1481	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	430707	6410167	1482	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430780	6410387	1483	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	430822	6410615	1484	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430807	6411133	1485	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	430814	6411141	1486	Garmin	TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	430724	6412260	1487	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430503	6412534	1488	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	430352	6412742	1490	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	430360	6412757	1491	Garmin	TK
17/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	430352	6412749	1492	Garmin	TK
20/12/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	412837	6421426	1494	Garmin	TK
20/12/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	412830	6421421	1495	Garmin	TK
20/12/2023	Myara North	Habitat	Marri	Good	1100	PW alignment	413436	6421108	1497	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	413578	6421025	1498	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	413601	6420994	1499	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1500	PW alignment	413581	6420991	1500	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	413630	6420986	1501	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	413632	6420984	1502	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	700	PW alignment	413890	6420796	1503	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	413902	6420809	1504	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	413949	6420797	1505	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	414320	6420453	1506	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1500	PW alignment	414430	6420341	1507	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	414647	6420309	1509	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1200	PW alignment	414826	6420396	1513	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	414814	6420389	1514	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	414791	6420385	1515	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	900	PW alignment	414789	6420383	1516	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	414505	6420325	1517	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	414503	6420326	1518	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	414428	6420403	1519	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	414424	6420405	1520	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	414395	6420485	1521	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	414256	6420566	1522	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	414245	6420573	1523	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	414262	6420615	1524	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	PW alignment	414185	6420637	1525	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	800	PW alignment	412988	6421386	1526	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 2	427647	6419409	1527	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 2	427604	6419435	1528	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	427567	6419494	1529	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 2	427462	6419678	1530	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 2	427263	6420139	1531	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	427264	6420133	1532	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 2	426902	6421178	1533	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1500	Boundary 2	426919	6421211	1535	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	426824	6421389	1536	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 2	426819	6421382	1537	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 2	426780	6421481	1538	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	426434	6422219	1539	Garmin	TK
20/11/2023	Myara North	Habitat	Flooded Gum	Good	600	Boundary 2	425553	6423676	1542	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 2	425498	6423825	1546	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 2	425476	6423847	1547	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 2	425470	6423859	1548	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 2	425425	6423902	1549	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	425274	6424057	1550	Garmin	TK

20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	425304	6424095	1551	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 2	425198	6424167	1552	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	425089	6424490	1553	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	425084	6424501	1554	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	425073	6424513	1555	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	424585	6425289	1556	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	424130	6424923	1557	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	424036	6424838	1558	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	423557	6424556	1559	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	423469	6424576	1560	Garmin	TK	
20/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	423459	6424565	1561	Garmin	TK	
21/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	423354	6424474	1562	Garmin	TK	
21/11/2023	Myara North	Habitat	Blackbutt	Good	1200	Boundary 1	423322	6424511	1563	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	423470	6424632	1564	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	423463	6424650	1565	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	423565	6424636	1566	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	423567	6424650	1567	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	423584	6424676	1568	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	423618	6424676	1569	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	424072	6424963	1570	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	424112	6424977	1571	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	424463	6425209	1572	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430570	6413286	1573	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430440	6412884	1574	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430442	6412866	1575	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430533	6413002	1576	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	430608	6413228	1580	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	430639	6413223	1581	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	430648	6413332	1582	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	430687	6413384	1583	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	430679	6413452	1584	Garmin	TK	
21/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	430715	6414194	1585	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	422957	6424232	51	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	422946	6424210	52	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	422944	6424198	53	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	422903	6424136	55	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	422910	6424163	108	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	422718	6424052	110	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	422732	6424021	111	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	422680	6424069	112	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	422644	6424026	113	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	422635	6424013	114	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	422598	6424012	115	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	422575	6424024	116	Garmin	TK	
26/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 1	422503	6423995	117	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	422428	6423894	120	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	422576	6423928	121	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	422556	6423933	122	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	421873	6423769	123	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	421862	6423776	124	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	421862	6423779	125	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	420554	6423884	126	Garmin	TK	
27/11/2023	Myara North	Significant tree	Jarrah	Good	6350	Boundary 1	420817	6423833	127	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	420833	6423828	128	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	421448	6423738	129	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	419193	6423150	131	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 2	419196	6423148	132	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 2	419198	6423125	133	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 2	419169	6423101	134	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 2	419226	6423168	136	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 2	419213	6423180	137	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 2	419757	6423341	138	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 2	419404	6423037	140	Garmin	TK	

27/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 2	419385	6423069	141	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 2	419357	6423030	142	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	419344	6423011	143	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 2	419323	6423013	144	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	419299	6423053	146	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 2	419302	6423072	147	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 2	419299	6423069	148	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	419288	6423069	149	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 2	419268	6423082	150	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 2	419327	6423091	152	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	419608	6423332	153	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	419608	6423338	154	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 2	419687	6423381	155	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	419695	6423401	169	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	419863	6423430	170	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	419922	6423500	171	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	420114	6423609	172	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	420120	6423620	173	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	420125	6423617	174	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	420186	6423644	175	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	420225	6423640	176	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	420224	6423601	177	Garmin	TK	
27/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	420270	6423630	178	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	418581	6422407	180	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	418580	6422416	181	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 2	418593	6422416	182	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 2	418835	6422667	184	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	418831	6422661	185	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 2	418848	6422649	186	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 2	418800	6422607	187	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418480	6422417	190	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418453	6422272	191	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	418417	6422262	192	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	418462	6422174	193	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1400	Boundary 1	418459	6422248	194	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	418439	6422213	195	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418384	6422124	196	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418397	6421909	197	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418421	6421870	198	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418467	6421791	199	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418444	6421730	200	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418457	6421737	201	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1400	Boundary 1	418676	6421268	202	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418659	6421215	203	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418656	6421222	204	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 1	417764	6419273	207	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	418043	6419387	208	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418069	6419426	209	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418391	6419635	210	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	418400	6419663	212	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	418417	6419653	213	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	418427	6419660	214	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	418431	6419658	215	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	418472	6419729	216	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	418468	6419730	217	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418468	6419736	218	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418482	6419775	219	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	418486	6419778	220	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418506	6419783	221	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	418505	6419831	222	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1400	Boundary 1	418696	6419992	223	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	418718	6420016	224	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	418837	6420121	225	Garmin	TK	

28/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	418830	6420124	226	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418754	6420563	228	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418797	6420752	229	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	418707	6420791	230	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	418719	6420782	231	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	418725	6420677	232	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	418743	6420411	233	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	1500	Boundary 1	418781	6420151	236	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418785	6420151	237	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	800	Boundary 1	418779	6420145	238	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	600	Boundary 1	418767	6420140	239	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	418760	6420137	241	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	418760	6420127	242	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	800	Boundary 1	418676	6420094	243	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	418413	6419777	245	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418410	6419771	246	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	418403	6419762	247	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	418327	6419698	248	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418282	6419632	249	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	418156	6419499	251	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	418039	6419445	252	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417977	6419421	253	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	1500	Boundary 1	417936	6419392	254	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417910	6419346	255	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417836	6419280	256	Garmin	TK	
28/11/2023	Myara North	Habitat	Bullich	Good	500	Boundary 1	417064	6419656	260	Garmin	TK	
28/11/2023	Myara North	Habitat	Bullich	Good	1000	Boundary 1	416926	6419731	261	Garmin	TK	
28/11/2023	Myara North	Habitat	Bullich	Good	900	Boundary 1	416929	6419716	262	Garmin	TK	
28/11/2023	Myara North	Habitat	Blackbutt	Good	1800	Boundary 1	416906	6419738	263	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	416841	6419627	267	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	416889	6419584	268	Garmin	TK	
28/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417043	6419346	269	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	417410	6419186	270	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	417399	6419195	271	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417365	6419158	272	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	417270	6419207	273	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417170	6419188	276	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417226	6419138	277	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	417297	6419122	278	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	417734	6419126	280	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	417794	6419109	281	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	417183	6418404	282	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	417178	6418406	283	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	417171	6418407	284	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417162	6418402	285	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	417205	6418415	286	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417190	6418417	287	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	417186	6418415	288	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	417593	6418755	290	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417705	6418861	293	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	417719	6418892	295	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	417557	6418809	299	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417509	6418715	300	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417502	6418711	301	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417259	6418503	302	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	417107	6418347	303	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	416714	6418470	304	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	416638	6418500	305	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	416538	6418534	306	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	416649	6418409	312	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	416673	6418406	313	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	415908	6418520	314	Garmin	TK	
29/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	415894	6418534	315	Garmin	TK	

29/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	416379	6418404	316	Garmin	TK	
29/11/2023	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	416390	6418425	317	Garmin	TK	
29/11/2023	Myara North	Habitat	Blackbutt	Good	1500	Boundary 1	416408	6418431	319	Garmin	TK	
29/11/2023	Myara North	Habitat	Blackbutt	Good	1700	Boundary 1	416391	6418448	320	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	416284	6418540	321	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	416285	6418542	325	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	416288	6418543	326	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	416225	6418605	327	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	415978	6418635	328	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	415971	6418620	329	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1300	Boundary 1	415869	6418573	332	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	415836	6418534	334	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	900	Boundary 1	415838	6418523	335	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	700	Boundary 1	415806	6418453	336	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	800	Boundary 1	415806	6418413	337	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	415819	6418347	338	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1100	Boundary 1	415185	6417024	339	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	415186	6417227	340	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1200	Boundary 1	415107	6417341	341	Garmin	TK	
30/11/2023	Myara North	Habitat	Marri	Good	1400	Boundary 1	415272	6416962	342	Garmin	TK	
7/12/2023	Myara North	Habitat	Marri	Good	1000	Boundary 1	416348	6415799	654	Garmin	TK	
7/12/2023	Myara North	Habitat	Marri	Good	600	Boundary 1	416093	6415798	655	Garmin	TK	
7/12/2023	Myara North	Habitat	Marri	Good	500	Boundary 1	416082	6415800	656	Garmin	TK	
11/12/2023	Myara North	Habitat	Blackbutt	Good	800	PW alignment	421585	6418714	660	Garmin	TK	
11/12/2023	Myara North	Habitat	Blackbutt	Good	800	PW alignment	421593	6418786	662	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	500	PW alignment	421592	6418792	663	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	800	PW alignment	421654	6419317	667	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	500	PW alignment	421651	6419307	668	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	700	PW alignment	421652	6419276	669	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	700	PW alignment	423106	6417260	671	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1300	PW alignment	423099	6417248	672	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1300	PW alignment	423037	6417305	675	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	422945	6417275	676	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1200	PW alignment	422845	6417366	677	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	800	PW alignment	422843	6417377	678	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	422695	6417511	679	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	600	PW alignment	422693	6417528	680	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	422677	6417552	681	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	600	PW alignment	422664	6417553	683	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	500	PW alignment	422634	6417547	684	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1000	PW alignment	422613	6417575	686	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	600	PW alignment	422635	6417514	687	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	900	PW alignment	422633	6417520	688	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1200	PW alignment	422837	6417285	689	Garmin	TK	
11/12/2023	Myara North	Habitat	Marri	Good	1200	PW alignment	422847	6417299	690	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	1400	Boundary 1	429910	6409554	1280	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	600	Boundary 1	429860	6409587	1281	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	900	Boundary 1	429860	6409560	1282	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	429814	6409568	1283	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	1100	Boundary 1	429798	6409570	1284	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	429740	6409568	1285	Garmin	TK	
10/01/2024	Myara North	Habitat	Blackbutt	Good	1500	Boundary 1	429748	6409595	1286	Garmin	TK	
9/01/2024	Myara North	Habitat	Flooded Gum	Good	600	Boundary 1	429107	6408877	1586	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	600	Boundary 1	429111	6408884	1587	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	700	Boundary 1	429115	6408894	1588	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	429136	6408892	1589	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000. 900	Boundary 1	429172	6408928	1590	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	429191	6408942	1591	Garmin	TK	
9/01/2024	Myara North	Habitat	Marri	Good	1100	Boundary 1	429205	6408956	1592	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	900	Boundary 1	429209	6408965	1593	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	429191	6408981	1594	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	800	Boundary 1	429196	6408987	1595	Garmin	TK	
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000	Boundary 1	429197	6408995	1596	Garmin	TK	

9/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429200	6409007	1597	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	?		Boundary 1	429250	6409081	1598	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good		700	Boundary 1	429215	6409073	1599	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good		1500	Boundary 1	429229	6409085	1600	Garmin	TK
9/01/2024	Myara North	Habitat	Marri	Good		800	Boundary 1	429239	6409086	1601	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good		800	Boundary 1	429245	6409060	1602	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429232	6409102	1603	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	429223	6409101	1604	Garmin	TK
9/01/2024	Myara North	Habitat	Marri	Good		1000	Boundary 1	429240	6409119	1605	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		800	Boundary 1	429241	6409118	1606	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	429243	6409128	1607	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1100	Boundary 1	429204	6409159	1608	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	429207	6409179	1609	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		1000	Boundary 1	429204	6409228	1610	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		600	Boundary 1	429185	6409194	1611	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		600	Boundary 1	429192	6409205	1612	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429168	6409249	1613	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		800	Boundary 1	429170	6409268	1614	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		700	Boundary 1	429169	6409267	1615	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		700	Boundary 1	429180	6409266	1616	Garmin	TK
10/01/2024	Myara North	Habitat	Flooded Gum	Good		700	Boundary 1	429179	6409290	1617	Garmin	TK
10/01/2024	Myara North	Habitat	Marri	Good		1000	Boundary 1	429208	6409343	1618	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		800	Boundary 1	429218	6409351	1619	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1300	Boundary 1	429238	6409355	1620	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429221	6409351	1621	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429221	6409352	1622	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429248	6409367	1623	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1300	Boundary 1	429284	6409359	1624	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1100	Boundary 1	429272	6409389	1625	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	429303	6409397	1626	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429284	6409408	1627	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1400	Boundary 1	429272	6409388	1628	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429317	6409437	1629	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1000	Boundary 1	429356	6409521	1630	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		800	Boundary 1	429409	6409488	1631	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		700	Boundary 1	429422	6409483	1632	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1300	Boundary 1	429448	6409495	1633	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	429448	6409505	1634	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1200	Boundary 1	429457	6409551	1635	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	429472	6409508	1636	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1200	Boundary 1	429485	6409531	1637	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		700	Boundary 1	429526	6409529	1638	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1400	Boundary 1	429525	6409526	1639	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1100	Boundary 1	429528	6409554	1640	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		900	Boundary 1	430005	6409595	1641	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		600	Boundary 1	430004	6409590	1642	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1500	Boundary 1	429972	6409558	1643	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1400	Boundary 1	429969	6409588	1644	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		600	Boundary 1	429958	6409578	1645	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1500	Boundary 1	429929	6409567	1646	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1400	Boundary 1	429915	6409568	1647	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		600	Boundary 1	429739	6409610	1648	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		600	Boundary 1	429722	6409605	1649	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		800	Boundary 1	429703	6409621	1650	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		800	Boundary 1	429707	6409636	1651	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		600	Boundary 1	429707	6409605	1652	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1200	Boundary 1	429756	6409622	1653	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1800	Boundary 1	429772	6409611	1654	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1100	Boundary 1	429796	6409620	1656	Garmin	TK
10/01/2024	Myara North	Habitat	Marri	Good		1000	Boundary 1	429794	6409626	1657	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1300	Boundary 1	429811	6409609	1658	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1100	Boundary 1	429819	6409598	1659	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good		1800	Boundary 1	429838	6409589	1660	Garmin	TK

10/01/2024	Myara North	Habitat	Blackbutt	Good	1000. 900		Boundary 1	429842	6409613	1661	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429823	6409613	1662	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429829	6409637	1663	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1200		Boundary 1	429848	6409624	1664	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429880	6409631	1665	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	800		Boundary 1	429882	6409642	1666	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429903	6409615	1667	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	600		Boundary 1	429905	6409621	1668	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	700		Boundary 1	429918	6409625	1669	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1500		Boundary 1	429932	6409614	1670	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429964	6409630	1671	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	900		Boundary 1	429963	6409629	1672	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1800		Boundary 1	429994	6409534	1673	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1500		Boundary 1	430005	6409515	1674	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1100		Boundary 1	430044	6409509	1675	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	430048	6409498	1676	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	430071	6409510	1677	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1100		Boundary 1	430109	6409521	1678	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	800		Boundary 1	430093	6409529	1679	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1100		Boundary 1	430132	6409530	1680	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	430123	6409550	1681	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	600		Boundary 1	430463	6409597	1682	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	600		Boundary 1	430502	6409709	1683	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	900		Boundary 1	430502	6409734	1684	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1200		Boundary 1	430588	6409863	1685	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	800		Boundary 1	430590	6409856	1686	Garmin	TK
10/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	430628	6409856	1687	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1200		Boundary 1	429526	6409681	1248	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	700		Boundary 1	429529	6409657	1249	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	600		Boundary 1	429532	6409650	1250	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	600		Boundary 1	429529	6409615	1251	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1200		Boundary 1	429531	6409613	1252	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429540	6409627	1253	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429545	6409635	1259	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1200		Boundary 1	429554	6409657	1260	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429562	6409687	1261	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1200		Boundary 1	429583	6409691	1263	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1100		Boundary 1	429592	6409691	1264	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	700		Boundary 1	429609	6409676	1265	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1100		Boundary 1	429614	6409669	1266	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	800		Boundary 1	429645	6409665	1267	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	800		Boundary 1	429647	6409667	1268	Garmin	TK
9/01/2024	Myara North	Habitat	Blackbutt	Good	1000		Boundary 1	429660	6409663	1269	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	800		Boundary 1	430077	6414872	1173	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	430078	6414860	1174	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	1400		Boundary 2	430028	6415054	1175	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	900		Boundary 2	430023	6415170	1176	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	430031	6415193	1177	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	430025	6415195	1178	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	1100		Boundary 2	430031	6415219	1179	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	1000		Boundary 2	430031	6415217	1180	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	900		Boundary 2	430029	6415243	1181	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	500		Boundary 2	430024	6415245	1182	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	700		Boundary 2	430024	6415259	1183	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	800		Boundary 2	430007	6415294	1184	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	429991	6415328	1185	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	429964	6415359	1186	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	429967	6415362	1187	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	1100		Boundary 2	429951	6415362	1188	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	1000		Boundary 2	429762	6415483	1189	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	800		Boundary 2	429739	6415487	1190	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	500		Boundary 2	429260	6416007	1191	Garmin	TK
8/01/2024	Myara North	Habitat	Marri	Good	600		Boundary 2	429264	6416020	1192	Garmin	TK

8/01/2024	Myara North	Habitat	Marri	Good	700				Boundary 2		429279	6416019		1193	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	500				Boundary 2		429286	6416024		1194	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	1000				Boundary 2		429276	6416040		1195	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	900				Boundary 2		429253	6416069		1197	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	500				Boundary 2		429252	6416065		1198	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	600				Boundary 2		429185	6416224		1200	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	900				Boundary 2		429177	6416246		1201	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	800				Boundary 2		428522	6418236		1205	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	1000				Boundary 1		428511	6418234		1206	Garmin		TK
8/01/2024	Myara North	Habitat	Marri	Good	1100				Boundary 1		428708	6417975		1207	Garmin		TK
17/11/2023	Myara North	Habitat	Blackbutt	Good	1000		No signs	Yes	Boundary 1		430392	6409628		1451	Garmin		TK
27/11/2023	Myara North	Habitat	Marri	Good	1000		No signs	Yes	Boundary 1		421564	6423725		130	Garmin		TK
26/11/2023	Myara North	Habitat	Marri	Good	1300		No signs	Yes	Boundary 1		422758	6424091		109	Garmin		TK
28/11/2023	Myara North	Habitat	Marri	Good	1000		No signs	Yes	Boundary 1		417722	6419306		206	Garmin		TK
14/11/2023	Myara North	Possible nest	Marri	Good	900	Side entry	No signs		PW alignment		419943	6421489		1351	Garmin		TK
14/11/2023	Myara North	Possible nest	Marri	Good	1000	Side entry	No signs		PW alignment		415391	6420188		1387	Garmin		TK
14/11/2023	Myara North	Possible nest	Marri	Good	1000	Side entry	No signs		PW alignment		417026	6419181		1397	Garmin		TK
21/11/2023	Myara North	Possible nest	Marri	Good	1000	Side entry	No signs		Boundary 1		430534	6413039		1578	Garmin		TK
21/11/2023	Myara North	Possible nest	Marri	Good	800	Side entry	No signs		Boundary 1		430510	6413035		1579	Garmin		TK
26/11/2023	Myara North	Nest	Marri	Good. Sen 4	1028	Top entry	Chewing at entrance		2024 Boundary 1		422899	6424130		107	Garmin		TK
26/11/2023	Myara North	Possible nest	Marri	Good	1200	Side entry	No signs		Boundary 1		422241	6423881		118	Garmin		TK
27/11/2023	Myara North	Possible nest	Marri	Good	1000	Side entry	No signs		Boundary 2		419775	6423350		139	Garmin		TK
28/11/2023	Myara North	Possible nest	Marri	Dead	700	Top entry	No signs		Boundary 2		418530	6422329		179	Garmin		TK
28/11/2023	Myara North	Possible nest	Marri	Good	1000	Top entry	No signs		Boundary 1		418940	6422644		183	Garmin		TK
28/11/2023	Myara North	Nest	Marri	Good. Sen 3	1206	Side entry	Chewing at entrance		2022 Boundary 1		418618	6422472		189	Garmin		TK
28/11/2023	Myara North	Nest	Marri	Good	1311	Side entry	Chewing at entrance		2047 Boundary 1		418776	6421250		205	Garmin		TK
28/11/2023	Myara North	Nest	Marri	Good. Sen 4	920	Top entry	Chewing at entrance		2066 Boundary 1		418799	6420446		227	Garmin		TK
28/11/2023	Myara North	Possible nest	Marri	Good	1000	Side entry	No signs		Boundary 1		418183	6419533		250	Garmin		TK
28/11/2023	Myara North	Nest	Bullich	Good	735	Side entry	Chewing at entrance		2018 Boundary 1		417001	6419671		258	Garmin		TK
28/11/2023	Myara North	Nest	Bullich	Good	767	Side entry	Chewing at entrance		2074 Boundary 1		417004	6419670		259	Garmin		TK
29/11/2023	Myara North	Possible nest	Marri	Good	1500	Top entry	No signs		Boundary 1		417194	6418456		289	Garmin		TK
29/11/2023	Myara North	Possible nest	Marri	Good	1100	Top entry	No signs		Boundary 1		417599	6418755		291	Garmin		TK
29/11/2023	Myara North	Possible nest	Marri	Good	1200	Top entry	No signs		Boundary 1		417707	6418826		292	Garmin		TK
29/11/2023	Myara North	Possible nest	Marri	Good	1000	Top entry	No signs		Boundary 1		417711	6418886		294	Garmin		TK
29/11/2023	Myara North	Nest	Marri	Good. Sen 4	983	Side entry	Chewing at entrance		2046 Boundary 1		417863	6418982		296	Garmin		TK
29/11/2023	Myara North	Nest	Marri	Good. Sen 4	1213	Top entry	Chewing at entrance		2048 Boundary 1		417857	6419024		297	Garmin		TK
29/11/2023	Myara North	Possible nest	Marri	Good	1200	Side entry	No signs		Boundary 1		417681	6418954		298	Garmin		TK
29/11/2023	Myara North	Nest	Marri	Good. Sen 3	1279	Side entry	Chewing at entrance		2010 Boundary 1		416392	6418485		308	Garmin		TK
29/11/2023	Myara North	Possible nest	Marri	Good	1300	Side entry	No signs		Boundary 1		416499	6418461		310	Garmin		TK
30/11/2023	Myara North	Nest	Marri	Good. Sen 4	970	Side entry	Chewing at entrance		2017 Boundary 1		415877	6418611		331	Garmin		TK
11/12/2023	Myara North	Possible nest	Marri	Good	900	Top entry	No signs		PW alignment		421859	6419499		665	Garmin		TK
11/12/2023	Myara North	Nest	Marri	Good. Sen 4	948	Top entry	Chewing at entrance		2013 PW alignment		422671	6417553		682	Garmin		TK
8/01/2024	Myara North	Possible nest	Marri	Good	1000	Top entry	No signs		Boundary 1		429274	6416041		1196	Garmin		TK
8/01/2024	Myara North	Nest	Marri	Good. Sen 7	751	Top entry	Chewing at entrance		2110 Boundary 1		429248	6416125		1199	Garmin		TK
8/01/2024	Myara North	Possible nest	Marri	Good	1100	Top entry	No signs		Boundary 1		429104	6416389		1202	Garmin		TK
8/01/2024	Myara North	Possible nest	Marri	Good	600	Top entry	No signs		Boundary 1		429081	6416930		1204	Garmin		TK
13/11/2023	Myara North	Nest	Marri	Good. Sen 2	716	Top entry	Chewing at entrance		2026 Boundry 2		419217	6422722		1326	Garmin		TK
14/11/2023	Myara North	Nest	Marri	Good	1069	Top entry	Chewing at entrance		2208 PW alignment		421743	6419390		1346	Garmin		TK
14/11/2023	Myara North	Nest	Marri	Good. Sen 4	831	Top entry	Chewing at entrance		2021 PW alignment		419454	6422099		1356	Garmin		TK
14/11/2023	Myara North	Nest	Marri	Good. Sen 4	570	Top entry	Chewing at entrance		2060 PW alignment		419377	6422267		1359	Garmin		TK
14/11/2023	Myara North	Nest	Marri	Good. Sen 7	538	Top entry	Chewing at entrance		2062 PW alignment		415392	6420188		1386	Garmin		TK
15/11/2023	Myara North	Possible nest	Marri	Good	700	Side entry	No signs		PW alignment		418761	6416943		1410	Garmin		TK
15/11/2023	Myara North	Possible nest	Marri	Good	700	Side entry	No signs		PW alignment		417838	6415643		1414	Garmin		TK
15/11/2023	Myara North	Possible nest	Marri	Dead	1000	Top entry	No signs		PW alignment		417890	6415649		1416	Garmin		TK
15/11/2023	Myara North	Possible nest	Marri	Good	900	Side entry	No signs		PW alignment		418628	6416455		1425	Garmin		TK
17/11/2023	Myara North	Possible nest	Marri	Good	1000	Side entry	No signs		Boundary 1		430452	6412646		1489	Garmin		TK
20/12/2023	Myara North	Nest	Marri	Poor. Sen 8	1069	Side entry	Chewing at entrance		2042 PW alignment	Pair of Car	412783	6421438		1496	Garmin		TK
20/11/2023	Myara North	Possible nest	Marri	Good	1400	Side entry	No signs		PW alignment		414561	6420291		1508	Garmin		TK
20/11/2023	Myara North	Possible nest	Marri	Good	1200	Side entry	No signs		PW alignment		414728	6420341		1510	Garmin		TK
20/11/2023	Myara North	Nest	Marri	Good. Sen 5	1725	Side entry	Chewing at entrance		2041 PW alignment		414780	6420353		1512	Garmin		TK
20/11/2023	Myara North	Nest	Marri	Good. Sen 4	862	Side entry	Chewing at entrance		2045 Boundary 2		426861	6421183		1534	Garmin		TK
21/11/2023	Myara North	Nest	Marri	Good. Sen 2	862	Side entry	Chewing at entrance		2040 Boundary 1		430531	6413001		1577	Garmin		TK
10/01/2024	Myara North	Nest	Blackbutt	Good. Sen 2	1069	Top and side	Chewing at entrance		2112 Boundary 1		429157	6417077		1688	Garmin		TK

14/11/2023	Myara North	Significant tree	Blackbutt	Good	2050				PW alignment	421846	6419852	1348	Garmin	TK
28/11/2023	Myara North	Significant tree	Blackbutt	Good	2050				Boundary 1	418618	6420028	244	Garmin	TK
29/11/2023	Myara North	Significant tree	Blackbutt	Good	2050				Boundary 1	417274	6419204	274	Garmin	TK
29/11/2023	Myara North	Significant tree	Marri	Good	1925				Boundary 1	416462	6418451	309	Garmin	TK
20/11/2023	Myara North	Significant tree	Marri	Good	1600				Boundary 2	425528	6423779	1544	Garmin	TK
20/11/2023	Myara North	Habitat	Marri	Good	1200				Boundary 2	425502	6423812	1545	Garmin	TK
28/11/2023	Myara North	Nest	Marri	Good. Sen 5	808	Top entry	Old chewing at entrance	2028	PW alignment	418701	6422537	188	Garmin	TK