



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 7403/4
File Number: DER2016/000409
Duration of Permit: From 12 May 2017 to 12 May 2021

PERMIT HOLDER

Red Moon Property Holdings Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 1 on Plan 8940, Beedelup

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 48.12 hectares of native vegetation within the combined areas cross-hatched yellow and cross-hatched red on attached Plan 7403/4a.

CONDITIONS

1. Type of clearing authorised

This Permit does not authorise the Permit Holder to clear native vegetation between 1 May and 30 September of any given year within the area cross-hatched red on attached Plan 7403/4a.

2. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

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

3. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

4. Fauna management – black cockatoos

- (a) Prior to undertaking any clearing authorised under this Permit within the combined areas cross-hatched yellow and cross-hatched red on attached Plan 7403/4a, the Permit Holder must engage a *fauna specialist* to conduct a fauna survey of the Permit area to identify *black cockatoo breeding trees* suitable to be utilised by *black cockatoo species*.
- (b) Where *black cockatoo breeding trees* are identified under condition 4(a), the Permit Holder must engage a *fauna specialist* to map *black cockatoo breeding trees* within the permit area.
- (c) Each *black cockatoo breeding tree* identified shall be inspected by a *fauna specialist* for *evidence* of current or past breeding use by *black cockatoo species*.

- (d) Where *black cockatoo breeding tree(s)* with *evidence* of current breeding use by *black cockatoo species* is identified and cannot be avoided in accordance with condition 2(a) of this Permit, that tree(s) shall be monitored by a *fauna specialist* to determine when it is no longer in use for that breeding season;
- (e) Any *black cockatoo breeding tree(s)* with *evidence* of current breeding use by *black cockatoo species* shall not be cleared whilst it is in use for that breeding season as determined by the *fauna specialist* under condition 4(c) of this Permit.
- (f) Where a *black cockatoo breeding tree(s)* with *evidence* of past breeding use by *black cockatoo species* is identified and cannot be avoided in accordance with condition 2(a) of this Permit, that tree(s) shall only be cleared:
 - (i) outside the *black cockatoo species* breeding season; or
 - (ii) later the same day of the inspection required by condition 4(a) of this Permit; or
 - (iii) later the same day of a repeat inspection undertaken by a *fauna specialist* if that inspection does not identify *evidence* of current breeding use.
- (g) For each black cockatoo breeding tree with *evidence* of current or past breeding use by *black cockatoo species* identified, that cannot be avoided in accordance with condition 2(a) of this Permit, the Permit Holder shall install an artificial black cockatoo nest hollow.
- (h) Each artificial black cockatoo nest hollow required by condition 4(e) of this Permit must be installed prior to commencement of the next *black cockatoo species* breeding season following clearing of the related *black cockatoo breeding tree*.
- (i) The artificial black cockatoo nest hollow(s) required by condition 4(e) of this Permit must:
 - (i) be installed within the area hatched green on attached Plan 7403/4b;
 - (ii) be designed and placed in accordance with the guidelines provided in Schedule 1 to this Permit; and
 - (iii) be monitored and maintained in accordance with the guidelines provided in Schedule 2 to this Permit, for a period of at least ten years.
- (j) Within two months of clearing authorised under this permit within the combined areas cross-hatched yellow and cross-hatched red on attached Plan 7403/4a, the permit holder must provide the results of the *fauna survey* in a report to the *CEO*.

5. Records must be kept

The Permit Holder must maintain the following records:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) the species composition, structure and density of the cleared area;
 - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (iii) the date that the area was cleared;
 - (iv) the size of the area cleared (in hectares);
 - (v) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 2 of this Permit;
 - (vi) actions taken to minimise the risk of the introduction and spread of weeds and dieback in accordance with condition 3 of this Permit; and
- (b) In relation to black cockatoo fauna management pursuant to conditions 4 of this Permit:
 - (i) the time(s) and date(s) of inspection(s) by the *fauna specialist*;
 - (ii) a description of the *fauna specialist* inspection methodology employed;
 - (iii) the location of each *black cockatoo breeding tree* identified, recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;

- (iv) a description of the evidence of current or past breeding use observed for each *black cockatoo breeding tree* identified;
- (v) a photo of each *black cockatoo breeding tree* with evidence of current or past breeding use identified;
- (vi) for each *black cockatoo breeding tree* with evidence of current breeding use:
 - (1) the time and date it was determined to no longer be in use for that breeding season; and
 - (2) the evidence by which it was determined to no longer be in use for that breeding season.
- (vii) the time and date each *black cockatoo breeding tree* with evidence of current or past breeding use was cleared;
- (viii) the date each artificial *black cockatoo* nest hollow was installed;
- (ix) the location of each artificial *black cockatoo* nest hollow installed, recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (x) a photo of each artificial *black cockatoo* nest hollow installed;
- (xi) the dates each artificial *black cockatoo* nest hollow installed was monitored;
- (xii) a description of the monitoring methodology employed for each artificial *black cockatoo* nest hollow installed;
- (xiii) a description of the monitoring observations for each artificial *black cockatoo* nest hollow installed;
- (xiv) the date(s) each artificial *black cockatoo* nest hollow installed was maintained;
- (xv) a description of the maintenance activities undertaken for each artificial *black cockatoo* nest hollow installed;
- (xvi) the total number of artificial hollows installed; and
- (xvii) a copy of the *fauna survey* report and complete Metadata and Licensing Statement in accordance with the Environmental Protection Authority's *Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA)*.

6. Reporting

- (a) Prior to commencing clearing authorised under this Permit, the Permit Holder shall advise the *CEO* in writing of the date that clearing is scheduled to commence;
- (b) The Permit Holder must provide to the *CEO* on or before 30 June of each year, a written report:
 - (i) of records required under condition 5 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year;
- (c) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar, a written report confirming that no clearing under this permit has been carried out, must be provided to the *CEO* on or before 30 June of each year;
- (d) Prior to 12 February 2021, the Permit Holder must provide to the *CEO* a written report of records required under condition 5 of this Permit where these records have not already been provided under condition 6(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

black cockatoo breeding tree/s: means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater (or 30 centimetres or greater for *Eucalyptus salmonophloia* or *Eucalyptus wandoo*) that contain hollows suitable for breeding by Carnaby's cockatoo (*Calyptorhynchus latirostris*), *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo) and *Calyptorhynchus baudinii* (Baudin's cockatoo).

black cockatoo species: means one or more of the following species:

- a) *Calyptorhynchus latirostris* (Carnaby's cockatoo);
- b) *Calyptorhynchus baudinii* (Baudin's cockatoo); and/or
- c) *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo).

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of *Phytophthora* species on native vegetation;

evidence means showing chew marks or scratchings on the habitat tree representative of the species being surveyed, the presence of the species entering or leaving the habitat tree, and/or the presence of chicks/young;

fauna specialist: means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the *CEO* as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Biodiversity Conservation Act 2016*;


fauna survey means a field-based investigation, including a review of established literature, of the biodiversity of fauna and/or fauna habitat of the permit area and where conservation significant fauna are identified in the permit area, also includes a fauna survey of surrounding areas to place the permit area into local context;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

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Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

30 September 2020

Artificial hollows for Carnaby's cockatoo



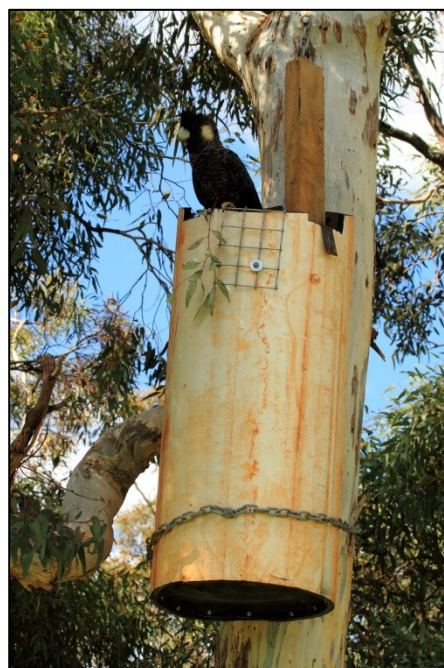
How to design and place artificial hollows for Carnaby's cockatoo

Artificial hollows can be used to help conserve the threatened Carnaby's cockatoo by enabling the cockatoos to breed in areas where natural hollows are limited.

A wide variety of artificial hollow designs have been used with mixed success. Evidence suggests that, while the hollow must meet some basic requirements, other factors such as proximity to existing breeding areas may be more important in determining the success of artificial hollows. Before using this information sheet to construct or install an artificial hollow, you should refer to the criteria listed in the separate information sheet; *When to use artificial hollows for Carnaby's cockatoo*.

This information sheet contains broad guidelines for the design and placement of artificial hollows for Carnaby's cockatoo.

Below are three examples of successful artificial hollows used by Carnaby's cockatoo for nesting. Artificial hollows made from a natural log with cut side entrance (left), white industrial pipe with top entrance (centre) and natural log with natural side entrance (right).



Photos by Christine Groom (left and right) and Rick Dawson (centre)

Walls

The walls of the artificial hollow need to be constructed from a material that is;

- Durable enough to withstand exposure to elements for an extended period of time (i.e. 20+ years).
- Able to simulate the thermal properties of a natural tree hollow.
- Not less than 380 mm in internal diameter.
- Preferably 1.2 m deep overall and 1m deep to top of substrate/nesting material.

Successful artificial hollows have been constructed from sections of salvaged natural hollow, black and white industrial pipe. When using non-natural materials care must be taken to ensure there are no toxic residues and that the materials are safe to ingest.

Base

The base of the artificial hollow must be;

- Able to support the adult and nestling(s).
- Durable enough to last the life of the nest.
- Free draining.
- At least 380 mm in diameter.
- Covered with 200 mm of sterile, dry, free draining material such as charcoal, hardwood woodchips or wood debris.

Do not use:

- Saw dust or fibre products that will retain moisture.

Example materials that could be used for artificial hollow bases include heavy duty stainless steel, galvanised or treated metal (e.g. Zinalume ®), thick hardwood timber slab or marine ply (not chipboard or MDF). The base material must be cut to size to fit internally with sharp or rough edges ground away or curled inwards and fixed securely to the walls.



Carnaby's cockatoo eggs in an artificial hollow.
Photo by Rick Dawson

Entrance

The entrance of the artificial hollow must;

- Have a diameter of at least 270 mm).
- Preferably be top entry which will minimise use by non-target species.

Top entry hollows are unattractive to nest competitors such as feral bees, galahs and corellas. Side entry hollows have been successful in areas where feral bees are not a problem and where galahs and corellas are deterred.

Ladder

For artificial hollows made of non-natural materials, or of processed boards, it is necessary to provide a ladder to enable the birds to climb in and out of the hollow easily.

The ladder must be;

- Securely mounted to the inside of the hollow.
- Made from an open heavy wire mesh such as WeldMesh™ with mesh size of 30 - 50 mm, or heavy chain.

Do not use:

- A material that the birds can chew.
- Galvanized because the birds may grip or chew the ladder and ingest harmful compounds.

If using mesh for the ladder, the width will depend on the curvature of the nest walls. A minimum width of about 60 - 100 mm is recommended.

Sacrificial chewing posts

For artificial hollows made of non-natural materials, or of processed boards, it is necessary to provide sacrificial chewing posts. The birds chew material to prepare a dry base on which to lay their egg(s).

The sacrificial chewing posts must:

- Be made of untreated hardwood such as jarrah, marri or wandoo
- Be thick enough to satisfy the birds' needs between maintenance visits.
- Extend beyond the top of the hollow as an aid to see whether the nest is being used.
- Be placed on the inside of the hollow.
- Be attached in such a way that they are easy to replace e.g. hook over the top of hollow or can slide in/out of a pair of U bolts fitted to the side of the hollow.

It is recommended that at least two posts are provided. Posts 70 x 50 mm have been used, but require replacing at least every second breeding season when the nest is active. Birds do vary in their chewing habits and therefore the frequency at which the chewing posts require replacement will also vary.



Bottom of an artificial hollow showing ladder that is fixed to the wall and a chewed sacrificial post which is 200 mm from the floor.

Photo by Rick Dawson

Mountings

The artificial hollows must be mounted such that:

- The fixings used will last the duration of the nest e.g. galvanized bracket or chain fixed with galvanized coach screws.
- It is secured by more than one anchor for security and stability.
- It is positioned vertically or near vertically.

Placement

Sites should be chosen within current breeding areas and where they can be monitored, but preferably not conspicuous to the general public. It is important that artificial hollows are placed where they will be accessible for future monitoring and maintenance. For more detail refer to the separate information sheet; *When to use artificial hollows for Carnaby's cockatoo*.

The height at which artificial hollows should be placed is variable. The average height of natural hollows in dominant tree species in the area is a good guide. Natural hollows used by Carnaby's cockatoos have been recorded as low as 2 m above the ground. If located on private property the hollows can be placed lower to the ground so they are accessible by ladder or a rope and pulley system can be used. Where public access is possible artificial hollows should be placed at least 7 m high (i.e. higher than most ladders) and on the side of the tree away from public view to reduce the chance of interference or poaching.

Carnaby's cockatoo show no preference for aspect of natural hollows, however, it may still be beneficial to place artificial hollows facing away from prevailing weather and where they receive the most shade and protection.

Artificial hollows to be placed in trees require:

- Accessibility of the tree for a vehicle, elevated work platform or cherry picker.
- A section of trunk 2-3 m long suitable for attaching the hollow

If necessary, artificial hollows may be placed on poles, but this may result in excessive exposure to sun during very hot weather. When erected on poles there should be:

- A hinge at the bottom of the pole that can be secured when the pole is in the upright position.
- Access for a vehicle to assist raising the pole.

Safety

Care needs to be taken when placing artificial hollows to ensure safety is considered at all times. Artificial hollows are heavy and require lifting and manoeuvring into position up to 7 m above the ground.

Maintenance and monitoring

Once artificial hollows have been placed they require monitoring and maintenance to ensure they continue to be useful for nesting by Carnaby's cockatoo. It is important to monitor artificial hollows to determine use by Carnaby's cockatoo, other native species as well as pest species. By undertaking monitoring the success of the design and placement of artificial hollows can be determined and areas for improvement identified for future placement of artificial hollows.

Monitoring can also assess whether any maintenance is required. Without regular maintenance artificial hollows are unlikely to achieve their objective (that is, they will fail to provide nesting opportunities for threatened cockatoos). Therefore it is important to continue a regime of regular maintenance while the artificial hollow is required. It may be several (to many) decades until a natural replacement hollow is available.

For further advice on monitoring and maintenance of artificial hollows please refer to the separate information sheet; *How to monitor and maintain artificial hollows for Carnaby's cockatoo*.



Carnaby's cockatoo female prospecting an artificial hollow.
Photo by Rick Dawson



Example fixing for artificial hollow
Photo by Christine Groom

Acknowledgements

This information sheet is a joint initiative of Birdlife Australia, the Western Australian Museum and the Department of Parks and Wildlife. Many individuals have contributed to its preparation. Special acknowledgement is made for the contributions of Ron Johnstone from the WA Museum, Alan Elliott from the Serpentine-Jarrahdale Land care Centre and Denis Saunders. This updated version was compiled by Rick Dawson Department of Parks and Wildlife).

Other information sheets in the series: Artificial hollows for Carnaby's cockatoo

- *How to design and place artificial hollows for Carnaby's cockatoo*
- *How to monitor and maintain artificial hollows for Carnaby's cockatoo*

Information sheets available on the *Saving Carnaby's cockatoo* webpage:

<http://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/threatened-animals/208-saving-carnaby-s-cockatoo>

Artificial hollows for Carnaby's cockatoo



How to monitor and maintain artificial hollows for Carnaby's cockatoo

It is important to monitor and maintain artificial hollows after they have been erected. Monitoring ensures that the effectiveness of the artificial hollow can be determined. It also means that problems with pest species or any maintenance requirements can be identified and resolved.

Without regular maintenance, artificial hollows are likely to fail to achieve their objective (that is, they will fail to provide nesting opportunities for threatened cockatoos). Therefore it is important to continue a regime of regular maintenance while the artificial hollow is required. It may be several (to many) decades until a natural replacement hollow is available.

Monitoring should be undertaken in order to detect:

- Use by Carnaby's cockatoo
- Maintenance requirements
- Use by other native species
- Use by pest species (e.g. feral bees, galahs, corellas etc.)



Carnaby's cockatoo female prospecting an artificial hollow.
Photo by Rick Dawson

How do I monitor artificial hollows?

Before undertaking monitoring of artificial hollows for Carnaby's cockatoo it is recommended that you seek advice from BirdLife Australia, the WA Museum or the Department of Parks and Wildlife. It is also important to contact Parks and Wildlife, Wildlife Licensing Section, to determine if a scientific licence is required (wildlifelicencing@dpaw.wa.gov.au).

Monitoring artificial hollows requires keen observation and naturalist skills. It is often not possible to observe evidence of breeding directly (i.e. nestlings or eggs) and inferences must be made based on observation. There are many techniques available to monitor artificial hollows. A combination of several is likely to achieve the best results.

Looking for signs of use

Cobwebs covering the entrance to the hollow will indicate that the hollow has not been used recently. This would also apply to other light debris that may have fallen to cover the opening partially. Signs of recent use or interest in the hollow include evidence of chewing.

Observing parent behaviour around the hollow

The behaviour of parent birds around a hollow will indicate an approximate age of young in the nest.

Parent behaviour	Approximate age/stage of young
Prospecting for hollow	Unborn
Male only seen out of hollow	Egg or very young nestling (< 3 - 4 weeks)
Both parents seen entering/exiting the hollow	Nestling(s) have hatched (> 3 - 4 weeks)

Observing feeding flocks

Flocks of all male birds indicate that the females are incubating eggs. When flocks are mixed it suggests the birds have either not laid yet or that the nestlings have hatched and no longer require brooding (approximately 3 - 4 weeks old).

Tapping

When females are sitting on eggs they will usually respond to tapping at the base of their tree (or pole) by appearing at the entrance or flying from the hollow opening. This is not a guarantee of breeding activity, but an indication that it is possibly occurring in the hollow.

Observing insect activity around nest

The faecal matter produced by nestlings in a nest attracts insects, especially flies and ants. The type and number of these insects will help indicate how old any nestlings present may be. Factors such as temperature and humidity will also affect insect activity and so observations of insect activity should only be used as supporting evidence for other indications of age/use. Blowflies around a nest usually indicate that a death has occurred.

Listening for nestlings

With experience it is possible to determine if one or two nestlings are present and a broad estimate of age based on the type and loudness of noises they make.

Looking inside the nest

This can be achieved either with the aid of a telescopic pole and camera or mirror, or with the use of a ladder or other climbing equipment. This method can obtain the most detailed monitoring information for artificial hollows. However it is also the most time consuming and difficult to organise. Special equipment is likely to be needed depending on the height and positioning of artificial hollows. There are also safety issues associated with ladder or rope climbing options to reach nests to undertake observations.

How often should I monitor artificial hollows?

The minimum frequency of monitoring and the techniques used will be determined by the aims of the monitoring and the resources available. It is important to limit disturbance to breeding birds and this should be considered when determining the techniques used and frequency.

How do I maintain artificial hollows?

Artificial hollows require maintenance to ensure they continue to have the greatest chance of them being used by Carnaby's cockatoos. Periodic maintenance checks should be undertaken at least every two years, preferably annually. These checks should be undertaken prior to the breeding season which is between July and January with breeding occurring later in this period in southern areas. It is important to maintain a regime of regular maintenance as long as the artificial hollow is required. It may take several (to many) decades until a natural replacement hollow is available.

Maintenance checks should assess the following as a minimum:

- Condition of chewing posts (if present)
- Condition of attachment points
- Condition of hollow bases
- Stability of tree or pole used to mount the artificial hollow



Artificial hollow base needing repair.
Photo by Christine Groom

Repairing hollows

Any problems identified during maintenance checks should be addressed, and any repairs required done, as soon as possible. If breeding is currently occurring, maintenance may need to be delayed if it is likely to disturb the parents or nestling. Likely maintenance needs include replacement of chewing posts (frequently) or nest bases (occasionally) and repairing of any cracks (infrequently). Maintenance concerns regarding the security of attachment points or the stability of the tree or pole should be addressed as a priority for safety reasons.

For artificial hollows known to be used, spare chewing posts should be taken into the field when undertaking maintenance checks.

Monitoring of artificial hollows:

Monitoring aim	Frequency of visits	Monitoring techniques
To determine possible use by Carnaby's cockatoo	At least once during peak breeding season (i.e. between September and December)	<ul style="list-style-type: none"> • Observing behaviour of adults around hollow • Tapping to see if female will flush from hollow (best undertaken between 10am and 3pm when females most likely to be sitting) • Listening for nestlings • Looking for evidence of chewing • Looking inside nest
To confirm use by Carnaby's cockatoo	At least two visits during peak breeding season (i.e. between September and December)	<p>To observe at least two of the following:</p> <ul style="list-style-type: none"> • Breeding behaviour of adults around hollow or evidence of chewing • Female flushed from hollow • Noises from nestlings in hollow <p>Or to observe:</p> <ul style="list-style-type: none"> • Nestlings or eggs in nest
To determine nesting success by Carnaby's cockatoo	The more visits, the better. Preferably fortnightly visits between July and December. As a minimum, at least 3 visits spread throughout breeding season.	<ul style="list-style-type: none"> • Looking inside nest to observe eggs or nestlings.
To determine use by any species	As often as possible.	<ul style="list-style-type: none"> • Inspection from ground as a minimum. • Looking inside nest for detailed observations.
To determine maintenance requirements	At least every two years and preferably annually if hollow fitted with sacrificial chewing posts, can be longer if without.	<ul style="list-style-type: none"> • A basic maintenance check can be undertaken from the ground. A ladder or elevated work platform will be required for a comprehensive check and to replace sacrificial chewing posts

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Plan 7403/4a

115°58'48.000"E

115°59'24.000"E

116°0'0.000"E

34°19'12.000"S

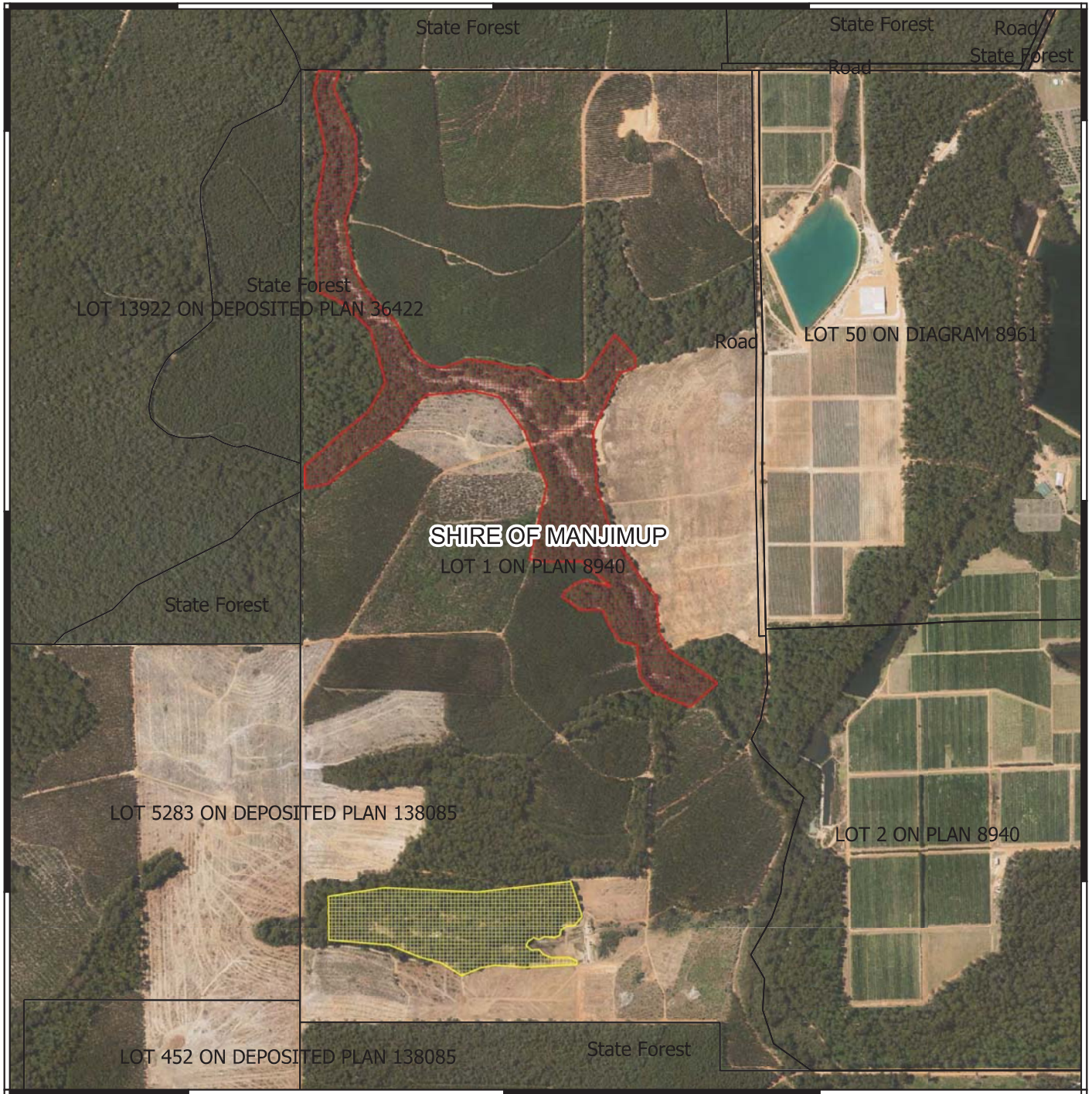
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



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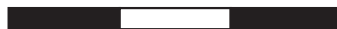


Map Layers

-  CPS areas approved to clear
-  CPS subject to conditions
-  Land Tenure LGATE - 226
-  Local Government Authorities



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MGA Zone 50
Geocentric Datum of Australia 1994

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Officer delegated under section 20 of the
Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA

Plan 7403/4b

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115°59'24.000"E

116°0'0.000"E

34°19'12.000"S

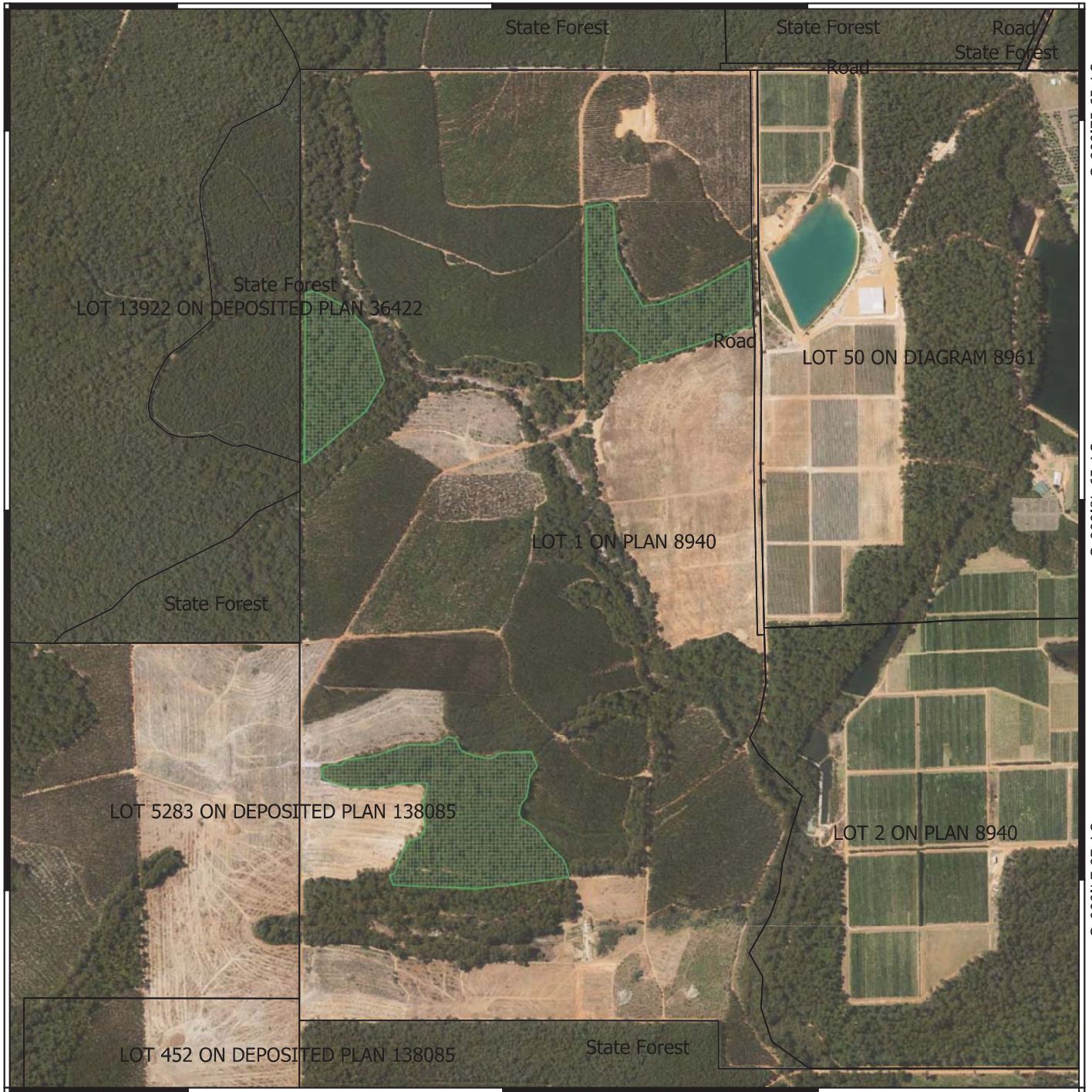
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Map Layers

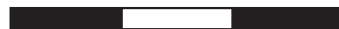
CPS subject to conditions

 Area subject to conditions

 Land Tenure LGATE - 226



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MGA Zone 50
Geocentric Datum of Australia 1994

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Officer delegated under section 20 of the
Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

1.1. Permit application details

Permit application No.: 7403/4
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Red Moon Property Holdings Pty Ltd ATF the Red Moon Property Trust

1.3. Property details

Property: Lot 1 on Plan 8940, Beedelup
Local Government Authority: Shire of Manjimup
Localities: Beedelup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
48.12		Mechanical Removal	Dam construction or maintenance

1.5. Decision on application

Decision on Permit: Granted
Decision Date: 30 September 2020

Reasons for Decision: On 6 February 2020, Clearing Permit CPS 7403/3 was granted to clear 48.12 hectares of native vegetation within Lot 1 on Plan 8940, Beedelup, for the purpose of dam construction. One appeal was lodged against the grant of this amendment.

This clearing permit amendment gives effect to the determination of the Minister for Environment (the Minister) to allow the appeal (Appeal Number: 010 of 2020). The Minister has requested the Department of Water and Environmental Regulation (DWER) to:

- Require the applicant to engage a suitably qualified person to identify and inspect any trees potentially suitable for breeding use by black cockatoos prior to clearing, and if identified delay clearing of any trees found to be occupied until no longer in use;
- Require the applicant to install artificial nesting boxes to replace any breeding trees with evidence of use that cannot be avoided;
- Require the applicant to monitor and maintain any installed artificial nesting boxes; and
- Require the applicant to keep records on efforts in relation to the implementation of these conditions, and report to DWER as required.

Given the above, the Delegated Officer decided to grant a clearing permit to reflect the Minister's determination.

2. Site Information

Clearing Description The proposes to clear 48.12 hectares of native vegetation within Lot 1 on Plan 8940, Beedelup, for the purpose of dam construction (Figure 1).

Vegetation Description The application area has been mapped as the following vegetation types:

- WH1: Tall open forest of *Eucalyptus diversicolor*-*Corymbia calophylla* on slopes and tall open forest of *Eucalyptus patens* on valley floor in perhumid and humid zones.
- YN1: Mixture of tall open forest of *Eucalyptus diversicolor* and tall open forest of *Corymbia calophylla*-*Eucalyptus patens*-*Eucalyptus marginata* subsp. *marginata* over *Agonis flexuosa* and *Agonis juniperina* on valleys in perhumid and humid zones.
- CRb: Tall open forest of *Corymbia calophylla*-*Eucalyptus diversicolor* on upper slopes with *Allocasuarina decussata*-*Banksia grandis* on upper slopes in hyperhumid and perhumid zones (Mattiske and Havel, 1998).

A site inspection undertaken by DWER staff on 30 January 2017 determined that the majority of the application area is closed forest consisting predominately of *Eucalyptus diversicolor* (Karri) and *Allocasuarina decussata* over bracken fern and *Malvaceae* sp. dominant understorey (Figure 2; DWER, 2017). *Lasiopetalum floribundum* was also common throughout (DWER, 2017). One area of peppermint trees (*Agonis flexuosa*) was observed within the application area (Figure 3; DWER, 2017).

Vegetation Condition The site inspection undertaken by DWER (2017) determined that the vegetation within the application area range from good to very condition (Keighery, 1994), described as:

- Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
- Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Soil type

The application area is mapped as occurring within the following mapped soil types:

- Wheatley Subsystem (Pimelia) – Shallow (20-40 m) minor valleys with low sideslopes (5-20%) and narrow swampy floors with a slightly incise stream channel. Soils are loamy gravels, sandy gravels and loamy earths (Schoknecht et al., 2004). Vegetation type WH1 is associated with this soil type
- Yanmah Subsystem (Pimelia) – Shallow (5-20 m) minor valleys, usually U-shaped with gentle sideslopes (3-10%) and broad swampy floors. Soils are loamy gravels, sandy gravels and deep sands with non-saline wet soils on the valley floors (Schoknecht et al., 2004). The YN1 vegetation type is associated with this soil type.
- Crowea (Pimelia), brown duplex Phase – Brown gravelly duplex soils and red earths; karri-marri forest (Schoknecht et al., 2004). The vegetation type CRb is associated with this soil type.

Comments

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area. A site inspection by DWER (2017) noted that the application area has previously been cleared, but has regenerated to very good (Keighery, 1994) condition.

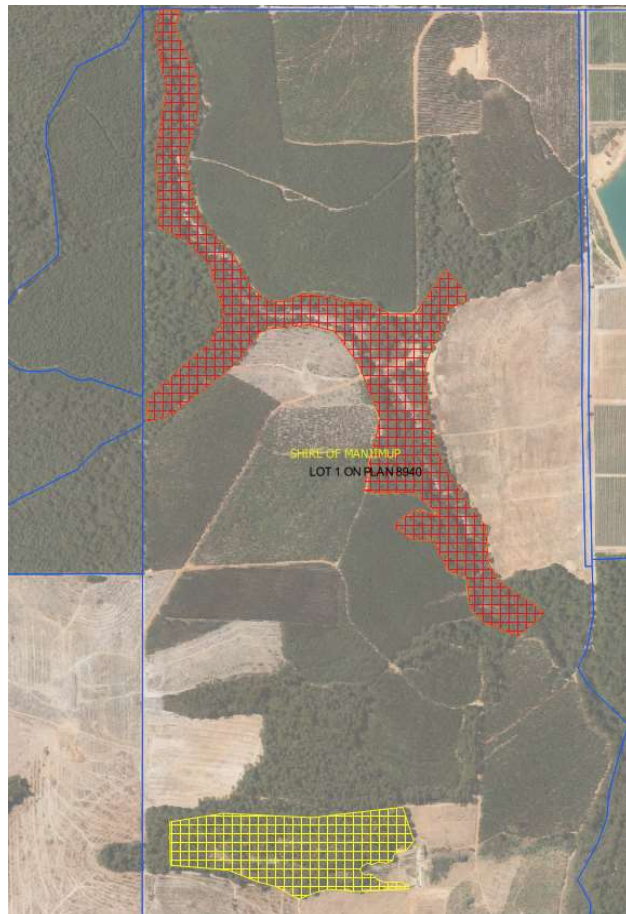


Figure 1: Application area includes the area hatched red and hatched yellow. The area hatched red is subject to additional erosion mitigation measures which restricts the clearing to be undertaken outside the period between 1 May and 30 September.



Figure 2: Vegetation typical of the application area, *Eucalyptus diversicolor* (Karri) and *Allocasuarina decussata* **Figure 3:** Small area of *Agonis flexuosa* (peppermint)

3. Assessment of application against clearing principles

This amendment is the result of an appeal determination made by the Minister for Environment regarding the conditions of Clearing Permit CPS 7403/3.

The assessment against the clearing principles outlined in Schedule 5 of the *Environmental Protection Act 1986* is unchanged and can be found in the Decision Report prepared for Clearing Permit CPS 7403/1, CPS 7403/2 and CPS 7403/3 (DWER, 2020).

The Minister determined that the proposed clearing may be at variance with principle (b) from the evidence presented in the Report to the Minister for Environment prepared by the Appeals Convenor (Office of the Appeals Convenor, 2020).

Planning instruments and other relevant matters.

The assessment against planning instruments and other matters is unchanged and can be found in the Decision Report prepared for Clearing Permit CPS 7403/3 (DWER, 2020).

4. References

- Department of Water and Environment Regulation (DWER) (2017) Site Inspection Report for Clearing Permit Application CPS 7403/1. Site inspection undertaken 30 January 2017. Department of Water and Environment Regulation, Western Australia (DWER Ref: A1380437).
- Department of Water and Environmental Regulation (DWER) (2020). CPS 7430/3 Decision report and permit. Available at: <ftp://ftp.dwer.wa.gov.au/permit/8253/Permit/>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Office of the Appeals Convenor (2020) Report to the Minister for Environment – Appeals In objection to the Decision of the Department of Water and Environmental Regulation to grant a clearing permit CPS 7403/3: Dam construction and orchard development, Beedelup, Shire of Manjimup. Office of the Appeals Convenor, Western Australia. Available at: <https://www.appealsconvenor.wa.gov.au/sites/default/files/010-20%20Appeals%20Convenor%20Report.pdf>
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.

GIS databases:

- DBCA TPFL flora
- DBCA WAHerb flora
- DBCA Threatened and Priority Community
- DBCA Threatened Fauna