



Appeals Convenor

Environmental Protection Act 1986

REPORT TO THE MINISTER FOR ENVIRONMENT

**APPEAL IN OBJECTION TO THE DECISION OF THE DEPARTMENT OF WATER AND
ENVIRONMENTAL REGULATION TO GRANT A CLEARING PERMIT**

**CLEARING PERMIT CPS 8460/1 FIRE MITIGATION AND FOREST
MANAGEMENT (THINNING), EASTBROOK, SHIRE OF MANJIMUP**

APPLICANT/PERMIT HOLDER: DANIEL CHRISTOPHER COLLINS

Appeal Number 015 of 2020

November 2020

Appeal summary

This report relates to an appeal lodged by Rebecca Donaldson against the decision of the Department of Water and Environmental Regulation (DWER) to grant Clearing Permit CPS 8460/1 to Daniel Christopher Collins. The permit was granted for the clearing of up to 40 hectares of native vegetation for the purpose of fire mitigation and forest management (thinning).

The appellant is seeking for the Minister for Environment to overturn DWER's decision to grant the permit, or for the impacts to be further clarified and mitigated and/or offset through additional permit conditions.

The appellant's concerns primarily relate to potential impacts to black cockatoos (Carnaby's cockatoo, Baudin's cockatoo and forest red-tailed black cockatoo) for which surveys to quantify foraging and current/future breeding habitat were not undertaken and no offset required. Concerns were also raised in relation to the adequacy of the permit conditions to manage impacts to western ringtail possums (WRPs).

In response to the appeal, DWER remained of the view that impacts to black cockatoo foraging habitat and WRPs have been adequately accounted for in its decision. However, DWER was of the view that additional conditions should be imposed to avoid impacts to black cockatoo breeding habitat (i.e. conditions limiting the size of trees authorised to be cleared and the timing of clearing). It was understood that DWER considered these conditions would negate the need for habitat surveys and offsets.

The applicant objected to the additional conditions recommended by DWER submitting that their imposition would effectively refuse the permit.

In investigating the appeal, it was identified that there are a range of fauna mitigation measures implemented by the Department of Biodiversity, Conservation and Attractions (DBCA) and the Forest Products Commission (FPC) in relation to timber harvesting activities undertaken on public lands. It was identified that some of these measures are relevant to the type of activities proposed by the permit including in relation to mitigating impacts to black cockatoos (both foraging and breeding habitat) and WRPs.

It was found that the conditions recommended by DWER were not commensurate with the level of risk to black cockatoo breeding identified, and that alternative requirements for a pre-clearing habitat tree survey and retention of habitat trees would be more appropriate.

It was also identified that:

- the thinning should be undertaken in a manner that ensures the proportional coverage of karri and karri/marri forest types within the application area are maintained noting, for example, that foraging values are higher for marri than for karri
- the retention of patches of second-storey species and coarse woody debris can benefit recolonisation of the application area by WRPs
- burning impacts can be minimised through the removal of fuels from within 1 metre of retained habitat trees and coarse woody debris, and through limiting burning to the period September through December

Therefore, it was identified that additional conditions should be imposed to further mitigate the risk of impacts to black cockatoos and WRPs.

Taking into account the additional conditions, the conditions already imposed by DWER, and that natural regeneration of the application area should occur, it was found that the proposed

clearing is unlikely to result in significant residual impacts to black cockatoos and that an offset is not warranted. It is considered that a decision to grant the permit is justified.

In coming to this conclusion, it was noted that it is reasonable for fire mitigation burning to be allowed on the property in the interests of protecting human life and assets.

Recommendation

It is recommended that the appeal be allowed to the extent that additional conditions are imposed requiring:

- mapping of the forest types present within the application area (e.g. pure karri forest versus mixed karri/marri forest) prior to clearing
- maintenance of the proportional coverage of each forest type mapped within the application area
- a ground based survey of the application area, undertaken prior to clearing and by an appropriately trained person, to identify trees containing occupied hollows, trees with hollows with clear evidence of use, and trees containing large broken limbs in the upper canopy where there is evidence of fauna activity suggestive of a hollow
- marking, recording and reporting details to DWER prior to clearing of any tree identified by the ground based survey
- retention of any tree identified by the ground based survey
- retention of primary and secondary habitat trees at rates documented by DBCA/FPC and based on the mapped forest type (except where retention rates are already achieved by the preceding measure) – to be counted as an average across the application area
- retention of at least one 30 metre diameter patch of second-storey species per hectare to be counted as an average across the application area
- retention of existing coarse woody debris that is greater than 3 metres long and has a pipe diameter of greater than 10 cm at a rate of at least one per hectare (includes associated record keeping and reporting)
- removal of fuels greater than 75 mm in diameter and 1 metre in length from within 1 metre of retained habitat trees and coarse woody debris prior to burning
- burning of the application area no more than once with burning only to be authorised during the months of September, October, November or December

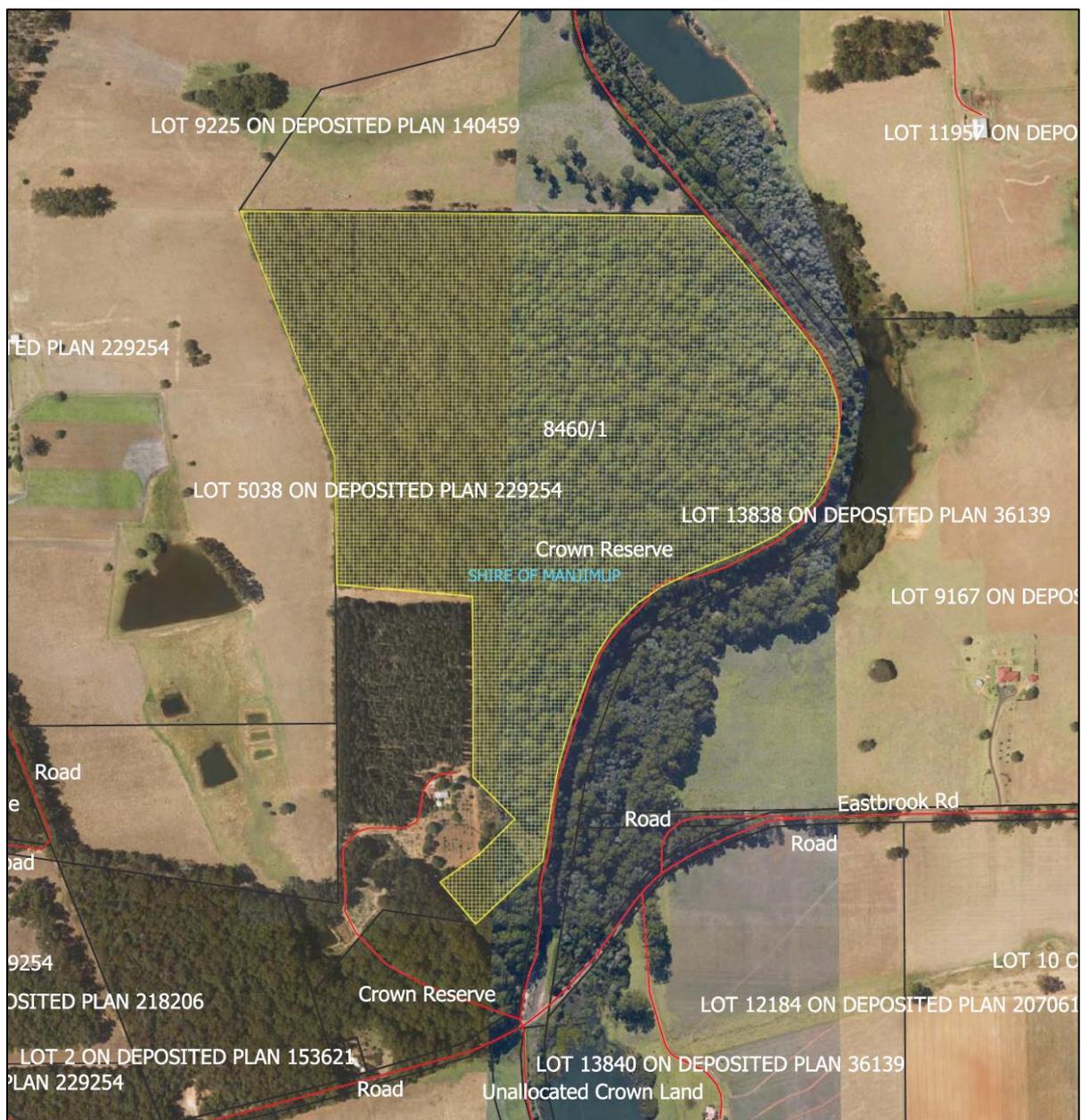
INTRODUCTION

This report relates to an appeal lodged by Rebecca Donaldson (the appellant) against the decision of the Department of Water and Environmental Regulation (DWER) to grant Clearing Permit CPS 8460/1 to Daniel Christopher Collins (the applicant).

CPS 8460/1¹ was granted for the clearing of up to 40 hectares (ha) of native vegetation on Lot 5038 on Plan 229254, Eastbrook, for the purpose of 'fire mitigation and forest management (thinning)'. The clearing granted includes both mechanical removal of vegetation and burning.

The clearing area applied for (the application area) is shown in Figure 1.

Figure 1: Location and extent of the application area (cross-hatched yellow)



(Source: DWER, Plan 8460/1)

¹ Clearing permit, plan and decision report and supporting information available at: <ftp://ftp.dwer.wa.gov.au/permit/8460/>

BACKGROUND

The applicant applied for a clearing permit in April 2019. In May 2019, DWER undertook a site inspection, and then in August 2019 DWER wrote to the applicant requesting a management plan be developed describing the measures which would be implemented to minimise and/or avoid impacts to the environmental values of the application area.² A Native Forest Property Management Plan (NFPMP) (December 2019) was subsequently prepared and submitted to DWER by the applicant.³

The NFPMP outlines that the northern portion of the application area comprises mostly karri (*Eucalyptus diversicolor*) with the eastern portion comprising mostly marri (*Corymbia calophylla*). The NFPMP sets out relevant history for the property, an assessment of the likelihood of occurrence of threatened and priority fauna, the owner's management objectives, the proposed silvicultural thinning approach and procedures, and the proposed fire management approach.

In undertaking its assessment, DWER considered the NFPMP, the findings of its site inspection, information from available databases (e.g. Geographic Information System datasets), and advice from other agencies including the Department of Biodiversity, Conservation and Attractions (DBCA). DWER's assessment concluded that the proposed clearing:

- is at variance to clearing principle (f), as the proposed clearing will impact on vegetation growing in association with a 'palusvale' wetland located along the eastern boundary of the application area
- may be at variance to clearing principle (b), as the application area may provide suitable habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*; endangered), Baudin's cockatoo (*Calyptorhynchus baudinii*; endangered), forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*; vulnerable), western ringtail possum (*Pseudocheirus occidentalis*; critically endangered), chuditch (*Dasyurus geoffroyi*; vulnerable), quokka (*Setonix brachyurus*; vulnerable) and quenda (*Isodon fusciventer*; Priority 4)
- may be at variance to clearing principle (g), due to the risk of water erosion owing to the steep topography of the application area
- may be at variance to clearing principle (h), as the proposed clearing may impact on the environmental values of a nearby un-named Nature Reserve through the introduction or spread of weeds and dieback, and will impact on a significant ecological linkage⁴ that includes conservation areas.

On 9 March 2020 DWER granted the permit subject to conditions, including to:

- limit clearing to the thinning of karri and marri, culling and burning of unsaleable trees, clearing for the establishment of log landings, and clearing and burning of understorey where undertaken in association with these activities (condition 6)
- avoid, minimise and reduce the impacts and extent of clearing (condition 7)
- implement dieback and weed hygiene measures (condition 8)

² DWER response to Appeal 015/20, 10 June 2020, pages 1, 6.

³ Available from: <ftp://ftp.dwer.wa.gov.au/permit/8460/>

⁴ As identified in: Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*. Western Australian Local Government Association (WALGA) and Department of Environment and Conservation (DEC), Perth.

- undertake thinning to specified criteria (retain 2 habitat trees/ha and 16-18 m²/ha basal area) (conditions 9a & 9b)
- rehabilitate log landings and post-clearing engage an environmental specialist to determine the species composition, structure and density of the understorey (conditions 9c & 9d)
- avoid clearing within 30 metres of the riparian vegetation of any watercourse or wetland (condition 10)
- undertake directional clearing to increase the chances of fauna being able to escape the clearing operations (condition 11)
- keep records on permit activities and report on these as specified (conditions 12 & 13).

OVERVIEW OF APPEAL PROCESS

In accordance with the EP Act, two reports relating to the matters raised on appeal are required for the Minister for Environment to determine the outcome of an appeal:

- a report from the Appeals Convenor, as required by section 109(3) of the EP Act
- a report from the decision making authority of the decision under appeal, as required by section 106(1).

This document is the Appeals Convenor's report to the Minister.

To properly advise the Minister, the Appeals Convenor conducted an investigation that included:

- review of the matters raised in the appeal submitted by the appellant
- review of the report from DWER provided under section 106 of the EP Act
- review of the response to the appeal provided by the applicant
- meetings with the applicant on 23 June 2020 and 18 August 2020 with the latter including a site visit
- review of other information, policy and guidance as considered necessary.

The environmental appeals process is a merits-based process. For appeals in relation to a DWER decision to grant a clearing permit, the Appeals Convenor normally considers the environmental merits of the assessment by DWER based on the clearing principles as set out in Schedule 5 of the EP Act, as well as planning and other relevant matters. Questions of additional information not considered by DWER, technical errors and attainment of relevant policy objectives are normally central to appeals

OUTCOME SOUGHT BY APPELLANT

The appellant is seeking for the Minister to overturn DWER's decision to grant the clearing permit or for the impacts to be further clarified and mitigated/offset through additional permit conditions.

GROUNDINGS OF APPEAL

The appellant's concerns primarily relate to potential impacts to black cockatoos (Carnaby's cockatoo, Baudin's cockatoo and forest red-tailed black cockatoo) as well as management of impacts to western ringtail possums (WRPs). The concerns are explored as two separate grounds of appeal as outlined below.

GROUND 1: BLACK COCKATOOS

Appellant submissions

By their appeal, the appellant submitted that surveys of the application area to quantify the impact on foraging and current/future breeding habitat for black cockatoos have not been undertaken and should be required. The appellant is of the view that DWER's assessment relies on insufficient data and has not adequately characterised the impacts to black cockatoos. In submitting this view, the appellant outlined the following:

- the application area is within the known breeding ranges of all three species
- both karri and marri are present within the application area; karri and marri are important foraging and/or breeding habitat and the retention of foraging habitat within a few kilometres of breeding habitat is essential to maintain breeding populations
- DWER states 'the local area is highly vegetated' to justify the claim of no significant impacts on availability of food sources, however the permanent loss of any foraging habitat (particularly within the breeding range of all three species) may well be significant; regardless of other habitat nearby, habitat is currently insufficient for black cockatoos and this is driving their ongoing decline
- it is unclear what specific evidence DWER used to support the claim that 'the proposed clearing is for thinning, and therefore, the proposed clearing is not considered to significantly impact on the availability of food sources for black cockatoos', noting that the total amount of habitat to be removed and the extent to which the understorey will be burnt has not been quantified
- DWER appears to infer that the absence of 'confirmed roosting sites' within the application area means that the site is only used by black cockatoos 'intermittently', and that this in turn supports the claim that the clearing will not have a significant impact on food availability; it is incorrect to infer that 'intermittent' use of an area means it is less significant as foraging habitat; black cockatoos use many areas intermittently depending on peaks and troughs in fruiting seasons
- DWER's observations of black cockatoo foraging activity within the application area indicate the likely presence of roost sites nearby; the database for 'confirmed roost sites' is compiled primarily from the annual Great Cocky Count, which is focused largely on Carnaby's cockatoos on the Swan Coastal Plain, and it is likely that many roost sites for forest flocks remain unidentified
- lack of suitable breeding habitat has been identified as a major threat to the persistence of WA's black cockatoo populations, and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral guidelines for the three species recommend maintaining the long-term supply of trees with the potential to provide suitable nest hollows in the future, to support breeding over the medium/ long-term
- DWER states 'no hollows were observed', however many hollows are not visible from ground level, and effective assessments will use drones if required to identify hollows and check for evidence of use; further, DWER's site inspection did not cover the entire application area, potentially leaving many habitat trees unsurveyed

The appellant submitted that information from habitat surveys would inform the assessment including any conditions required to address black cockatoo impacts. A range of conditions that may be required were suggested and include:

- replacement of cleared foraging habitat with at least the same area of foraging vegetation, through revegetation in the range areas of the affected flocks

- avoidance of clearing within peak breeding season if there is a possibility that hollows are being used by black cockatoos for breeding
- retention of any trees containing currently used, or suitable breeding hollows, as well as trees that may provide suitable hollows in future; if this is not possible then measures to mitigate losses should be implemented, and could include installation of artificial hollows in nearby areas and/or revegetation using suitable hollow-forming tree species.

The appellant also submitted that cumulative impacts to black cockatoos requires consideration. The appellant noted that there is a large and growing number of actions by others involving clearing of smaller areas of important habitat for black cockatoos in the southwest. The appellant submitted that consideration of cumulative impacts of clearing is vital for the assessment of black cockatoo population viability and that this context should be considered in assessing the application.

DWER's assessment and response to the appeal

In relation to black cockatoos, it is noted that DWER's decision report states the following:

... The site inspection conducted by DWER officers (2019) identified that the application area appears to be regrowth from an historical clearing event and a majority of the trees are younger trees that are not likely to be suitable for breeding black cockatoos. The site inspection observed many tall karri trees but no hollows were observed. It is noted that given the large size of the application area, the site inspection did not cover the entire application area. Noting the vegetation present within the application, it is likely that suitable habitat trees may occur. Considering this, the application area may contain breeding habitat for black cockatoos. However, the clearing is for thinning and the applicant has committed to retaining 16 – 18 m²/hectare basal area and at least two habitat trees per hectare. Noting this, the proposed clearing is not likely to significantly impact on black cockatoo breeding habitat.

... Noting the vegetation types present within the application area, the application area comprises of suitable foraging habitat for black cockatoos. ... According to available databases, there are no confirmed roosting sites within either a 6 kilometre radius of the application area, or 12 kilometres radius, and the closest record of a roosting site is located approximately 16 kilometres from the application area.

Evidence of Black cockatoo foraging was observed during site inspection (DWER, 2019) by the way of chewed marri nuts. Presence of Black cockatoos was also confirmed by the applicant who stated that the earth dam located in the south-western portion of the application area is utilised by these species. Considering this, the application contains foraging habitat for black cockatoos. However, noting the local area is highly vegetated and based on the location of the confirmed roosting sites, it is likely that black cockatoos only utilise the application area intermittently. In addition, the proposed clearing is for thinning, and therefore, the proposed clearing is not considered to significantly impact on the availability of food sources for black cockatoos.⁵

DWER's assessment acknowledged the application area contains foraging habitat and may contain breeding habitat for black cockatoos, however, DWER did not require that habitat to be quantified. DWER was satisfied that both the available information and the applicant's retention commitments meant that significant impacts to black cockatoos were unlikely and the permit could be granted.

In relation to foraging habitat, this conclusion was reiterated in DWER's response to the appeal. DWER advised:

⁵ Decision report for Clearing Permit CPS 8460/1, 9 March 2020, pages 4-5.

To minimise direct impacts to the black cockatoo feeding habitat, Condition 9 was imposed on the Clearing Permit, which requires the Permit Holder to retain a minimum of 16-18 m²/ha basal area and two habitat trees/ha. ... the Department understood that the retention of 16m²/ha is the equivalent of the retention of approximately 81 trees with a diameter at breast height (DBH) of 500 millimetres (mm) per hectare. Noting this, the Department determined that Condition 9 will adequately mitigate the impacts of the proposed clearing on black cockatoo foraging habitat.

...

The Department had regard to the extent of native vegetation remaining within mapped Interim Biogeographic Regionalisation for Australia (IBRA) bioregion, South West Forest vegetation complexes and within the local area.

A review of statistics prepared by DBCA, detailing the remaining pre-European vegetation extent of mapped vegetation associations and regions demarcated through the IBRA framework statistics, determined that the Warren IBRA region retains approximately 79 per cent, and the mapped South West Forest vegetation complexes WH1, CRb and PM1 retain approximately 81, 86 and 65 per cent of their pre-European vegetation extents respectively. A review of available datasets determined that the local area retains approximately 57 per cent of native vegetation cover. The Department considers that the highly vegetated surrounding area is likely to contain foraging and breeding habitat.

Based on the Department's assessment, including a site inspection, and a review of the extent of native vegetation remaining within the close proximity of the Application Area, the Department was satisfied that the proposed clearing would not cause significant impacts to the black cockatoo foraging habitat.⁶

However, in relation to breeding habitat, after considering the appeal DWER came to the view that further conditions to protect such habitat should be imposed. DWER advised:

The Department's assessment determined that the Application Area potentially contains suitable breeding habitat for black cockatoos. The Department acknowledges the potential for trees with suitable breeding hollows to exist within the Application Area and considers that clearing of suitable breeding habitat should be avoided wherever possible. The Department also notes that the Permit Holder intends to conduct silviculture activities which could result in the removal of additional habitat trees despite the specification under Condition 9 of the Clearing Permit that two habitat trees per hectare be retained.

...

The Department recommends that all potentially suitable breeding trees (DBH >500 mm) be retained through additional conditions to the permit requiring:

- the avoidance of all potentially suitable breeding trees for black cockatoos; and
- clearing and burning to be conducted outside of relevant breeding seasons for black cockatoo species likely to utilise the area.⁷

It is understood that DWER is of the view that imposition of these conditions would fully mitigate the risk of impacts to breeding habitat meaning a habitat survey would still not be required.

Applicant submissions

In responding to the appeal, the applicant submitted that the primary purpose of the clearing permit application is fire mitigation. The applicant advised:

Our forest was selectively cut in early sawmilling operations late 19th century/early 20th century. It was minimally thinned for sawlogs again in the early 1970s. There is now heavy regrowth which is posing a significant risk of hot season wildfires. Cool autumn burns have

⁶ DWER response to Appeal 015/20, 10 June 2020, pages 5-6.

⁷ DWER response to Appeal 015/20, 10 June 2020, page 6.

been attempted on many occasions since the late 20th century without success. The last successful control burn of the whole forest was about 30 years ago. A concerted effort in 2016 resulted in the fire self-extinguishing after proceeding into the forest around 50m and no more than 100m from ignition points on the perimeter firebreaks.

...

Preparation of the forest for a control burn also requires thinning of marri and undergrowth, and removal of coarse woody debris. We propose thinning operations would, within the conditions of the Permit, consist of logging saleable timber, chipping what is not saleable, and using as much of the residue for biomass as is possible, to reduce damage to remaining trees by burning of excessive flammable material. The intent is to get optimum airflow for a cool burn that will proceed slowly but effectively throughout the entire forest.

...

The property is very steep and heavily forested and heavily vegetated with undergrowth. Therefore we haven't inspected the whole area, and costs of getting specialists in for habitat and breeding surveys would be very expensive. Much of the evaluations needs to be conducted progressively as harvesting occurs. Identification of habitat trees will happen as trees are marked for retention or harvesting.

...

The appeal, if upheld, would result in a very substantial restriction on our ability to carry out responsible forest management and fire risk mitigation on our property, and expose us and neighbours to severe harm and costs. Our proposed measures would not significantly reduce forest foraging available to cockatoos, and the affected canopy would swiftly reassert.

...

For reasons stated, we would very much wish to avoid the cost of having a survey conducted on cockatoos on the property, their roosting, and any useful habitat trees. Habitat trees will be identified prior to felling as part of a review and agreement on trees to be removed. Please note that we have been advised it would be impossible to survey canopies for nesting hollows by drone and to determine if they are in use, as proposed by the appellant.⁸

The applicant was advised of DWER's recommendation regarding avoiding all potential breeding trees and only clearing and burning outside breeding seasons. The applicant objected to DWER's recommendation arguing that, if implemented, this would in effect refuse the permit.

The applicant noted the appeal submits peak breeding months for Carnaby's and Baudin's cockatoos are October to January and for forest red-tailed black cockatoos are April to June and August to October. This leaves the months of February, March and July.

The applicant submitted that burning in February and March is either not permissible under the *Bush Fires Act 1954* or requires a permit under that Act. The applicant submitted that such a permit is unlikely to be obtained given the high fire risk conditions in those months. The applicant also submitted that conditions in July are too wet to enable the proposed operations to occur.

The applicant further submitted that the risk of breeding occurring within the application area is too low to warrant avoidance of all trees over 500 mm DBH and that such a requirement would unnecessarily limit the thinning operation. The applicant argued that the forest is too young to contain large hollow bearing trees noting the past logging and thinning activities that have occurred. The applicant submitted that this information should be the key consideration

⁸ Applicant response to Appeal 015/20, 9 April 2020.

in determining the likely presence of potential breeding habitat, rather than the presence of trees over 500 mm DBH.

Consideration

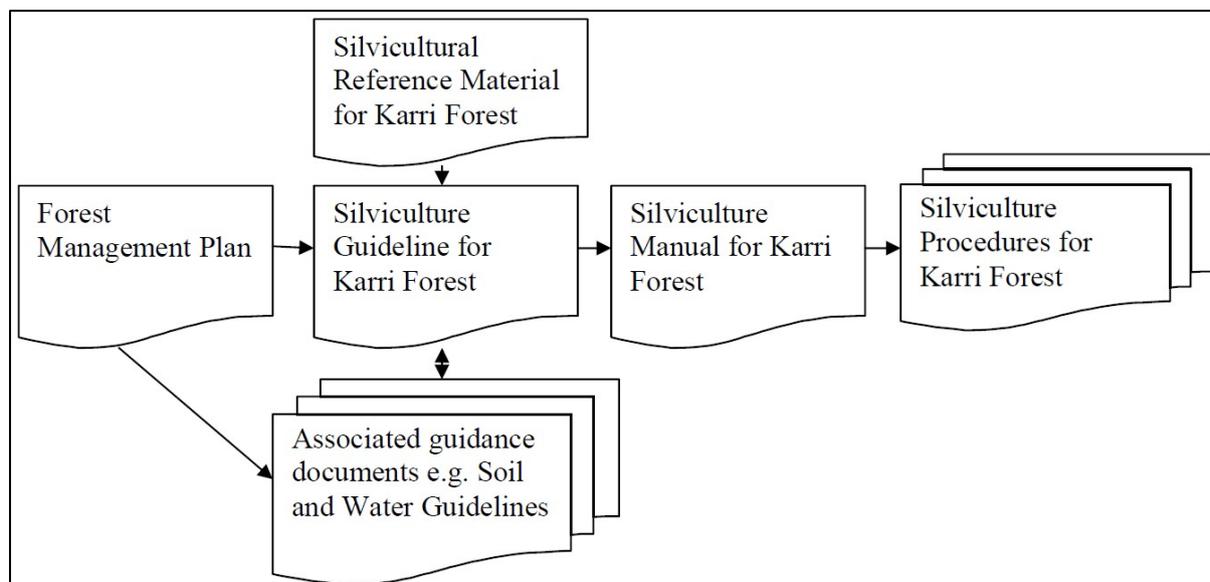
It is noted that most of the remaining karri forest within WA is located on lands vested in the Conservation Commission of Western Australia and managed by DBCA. Timber harvesting activities by the Forest Products Commission (FPC) may occur on some of these lands (e.g. on State Forest) with such operations subject to the requirements of the Forest Management Plan 2014-2023 (FMP). The FMP has been assessed by the Environmental Protection Authority (EPA) under Part IV of the EP Act and approved by the Minister for Environment.⁹

Noting the FMP deals with related activities, the appeal investigation included a review of some of the relevant literature on timber harvesting practices that are covered by or informed the plan. A site visit to the application area was also undertaken.

The overall goal of the FMP is for biodiversity to be conserved; the health, vitality and productive capacity of ecosystems to be sustained; soil and water resources to be protected; and the contribution to global carbon cycles to be sustained. The FMP sets out that the social, cultural and economic benefits valued by the community are to be produced in a manner taking account of the principles of ecologically sustainable forest management.

The FMP is supported by a suite of documents including the Silviculture Guideline for Karri Forest (2014). This guideline provides guiding principles, rationale and strategies, and is informed by the Silvicultural Reference Material for Karri Forest (2015). The guideline is also supported by manuals and procedures which are intended to provide detail regarding operational practices. The guideline includes a diagrammatical representation of these documents and this is shown below as Figure 2.

Figure 2: Diagrammatic representation of the hierarchy of documents to guide the application of silviculture in the karri forest



⁹ Refer EPA Report 1483 and Ministerial Statement 952 available from: <https://www.epa.wa.gov.au/proposals/proposed-forest-management-plan-2014-2023>

Habitat surveys/retention

In reviewing a range of the abovementioned documents, the following was identified in relation to habitat retention measures and habitat survey methods employed by DBCA/FPC:

- It is recognised that the number and quality of legacy elements (mature trees which contain or are likely to develop hollows, structurally rich understorey species and large coarse woody debris) can be reduced for periods of time in areas subject to timber harvest. Therefore, it is important that some long lived or mature elements are retained and continue to contribute to stand structural complexity, connectivity and landscape heterogeneity at the local scale.¹⁰ Some of the legacy element retention rates employed by DBCA/FPC include:
 - Retention of at least two primary habitat trees (trees with features attractive to wildlife, such as hollows) per hectare for areas of pure karri forest (defined as over 8 mature karri stems or stumps per hectare with a minimum patch size of 2 hectares)
 - Retention of at least five primary habitat trees and six secondary habitat trees (younger individuals earmarked to become future primary habitat trees) per hectare for areas of mixed karri marri forest (defined as between 2 to 8 mature karri stems or stumps per hectare with a minimum patch size of 2 hectares)¹¹
- The Fauna Distribution Information System (FDIS), a computerised system for predicting the occurrence of vertebrate fauna species in any given area of forest prior to timber harvesting or prescribed burning operations¹², is used by FPC to identify species for which targeted surveys and additional management actions (e.g. retention of additional legacy elements) may be required.¹³
- FPC commenced targeted fauna surveys within karri forest in April 2015. In relation to black cockatoos, the surveys include call-based surveys and senescent tree surveys for hollow identification. Bioacoustic survey trials also commenced in 2019. Surveys are completed by trained FPC staff with support from an experienced contract wildlife ecologist. FPC work in collaboration with DBCA staff who validate survey results and approve any additional management actions.¹⁴
- For senescent tree surveys, the position of senescent trees is identified using aerial/satellite photography and then each tree is surveyed from the ground and assessed for hollows and evidence of activity. Trees containing occupied hollows, or hollows with clear evidence of use are marked and retained. The survey approach is constrained by the visibility of hollows from the ground, particularly those in the upper canopy and those facing upwards. Where a tree contains large broken limbs in the

¹⁰ Department of Parks and Wildlife (2014) Karri Silviculture Guideline. Sustainable Forest Management Series, FEM Guideline 3. Page 14.

¹¹ Sourced from the following documents:

- Department of Parks and Wildlife (2014) Karri – Treemarking for retention. Procedure FEM035. Updated 21 November 2016.
- Department of Parks and Wildlife (2014) Karri – Thinning. Procedure FEM040. Updated 5 May 2016.
- Department of Parks and Wildlife (2014) Karri treemarking ready reckoner. Field Guide CEM039. Updated 25 May 2018.

¹² Christensen, P., Liddlelow, G., & Hearn, R. (2005). Assessment of vertebrate fauna prior to disturbance – timber harvesting and prescribed burning in the forests of Western Australia. The Forest Fauna Distribution Information System. October 2005.

¹³ Department of Parks and Wildlife (2014) Karri Silviculture Guideline. Sustainable Forest Management Series, FEM Guideline 3. Page 14.

¹⁴ Forest Products Commission (2020) Procedure 46 – Targeted fauna surveys within pure and mixed karri forest. Version 8 March 2020. Pages 1-2.

upper canopy and there is evidence of fauna activity suggestive of a hollow, that tree is also marked and retained.¹⁵

In undertaking this review, it was also identified that in some areas, past harvesting and regeneration practices have altered the species mix. For example, mature karri overstorey was selectively removed in mixed stands and has not regenerated, or mixed stands were harvested and replaced with karri only. Where mixed stands occur, regeneration to a single species is inappropriate as it would lead to simplification of species composition and impair ecosystem resilience.¹⁶

It is noted that FPC assess and record species composition prior to harvesting and implements thinning activities in a manner that ensures the mix identified remains.¹⁷ It is considered that this is an important practice in relation to managing potential impacts to black cockatoos noting, for example, that foraging values are higher for marri than for karri.

Therefore, in aiming to ensure biodiversity is conserved, including black cockatoo habitat values, the timber harvesting practices guided by the FMP and implemented by DBCA/FPC include:

- standard legacy element retention requirements;
- targeted fauna surveys where suggested by the FDIS;
- additional retention of legacy elements where considered appropriate as informed by targeted surveys; and
- mapping of pure karri forest versus mixed karri forest and the alignment of thinning prescriptions to ensure the composition identified is not modified.

It is acknowledged that the activities proposed by the applicant are not of the same scale as those proposed by the FMP. Furthermore, the mitigation of fire risk is a key consideration for CPS 8460/1. The appellant disputes that this is the primary purpose for the application, but it is noted that most of the applicant's property comprises remnant vegetation and a fire risk to his residence does exist.

The practices guided by the FMP and implemented by DBCA/FPC are informed by science and are considered appropriate towards identifying and managing impacts from timber harvesting activities. Therefore, it is considered that they provide a base for informing the assessment of CPS 8460/1, but diversion from those practices is acceptable where the context indicates as such.

In the case of CPS 8460/1, DWER imposed condition 9(a) which requires a minimum of 2 habitat trees to be retained per hectare. DWER has subsequently recommended that all trees over 500 mm DBH be retained. This recommendation exceeds the standard legacy retention requirements implemented by DBCA/FPC but is understood to be a means by which targeted surveys would not be required.

On the matter of targeted surveys, it is noted that the latest available aerial imagery for the application area (December 2017 – shown in Figure 1) does not indicate the presence of senescent crowns. The site inspections by both DWER and the Office of the Appeals Convenor (OAC) also identified that most trees were not large old trees that would be expected to contain potential black cockatoo breeding hollows. This is consistent with the description of the history of logging/thinning activities on the property provided by the applicant. However,

¹⁵ Ibid, pages 4-5.

¹⁶ Department of Parks and Wildlife (2014) Karri Silviculture Guideline. Sustainable Forest Management Series, FEM Guideline 3. Page 17.

¹⁷ FPC (2020). Karri forest management plan. Version 12, March 2020. Page 41.

due to the size of the application area and time/resource constraints, neither site inspection covered the entire area and the risk of breeding hollows being present remains.

Noting the aerial imagery and site inspection observations, it is considered that DWER's recommendation to require avoidance of all trees over 500 mm DBH is not commensurate with the level of risk identified.

It is considered that the risk can be appropriately mitigated by a ground based survey, undertaken prior to clearing by an appropriately trained person, to identify trees containing occupied hollows, trees with hollows with clear evidence of use, and trees containing large broken limbs in the upper canopy where there is evidence of fauna activity suggestive of a hollow. Any tree identified should be marked and have its location (i.e. GPS coordinates), species (e.g. karri or marri), orientation of hollow, type of evidence of fauna use (e.g. chew marks, calls) and species of fauna (if identifiable) recorded. These details should be provided to DWER prior to thinning and all identified trees should be retained.

The standard legacy element retention rates used by DBCA/FPC for primary and secondary habitat trees should also be applied, although they should not be cumulative to the retention of those trees identified by the ground based survey.

In relation to forest composition, it is noted that the NFPMP prepared by the applicant suggests that there are areas of both pure karri forest and mixed karri/marri forest, but these are not accurately delineated on a map. The OAC site inspection observed that the forest composition transitions from predominantly karri in the north and west to predominantly marri in the south and east.

The habitat tree retention rate in condition 9(a) of the permit is not linked to the different forest types present as is the practice by DBCA/FPC, nor did DWER impose any conditions requiring the species mix be maintained. It is considered that there is a risk the proposed thinning could alter the mix of karri and marri present within the application area which can impact black cockatoo habitat values.

Therefore, it is considered that a forest type mapping requirement should be added to the permit with the map to be provided to DWER prior to clearing. A condition should also be imposed requiring that the thinning operation does not alter the proportion of the different mapped forest types within the application area.

Burning

DWER's recommendation in response to the appeal also outlined that burning should not be authorised during black cockatoo breeding periods. In undertaking the review of DBCA/FPC's silvicultural documents, the following was identified in relation to burning practices:

- The opportunity for burning karri regrowth is limited because by the time the forest dries out, summer is well advanced. This makes it difficult to prevent the burn escaping and to protect timber values present from excessive heat. Opportunities for burning are improved after thinning when fuels have been reduced and a lower canopy density causes drying to occur as early as October.¹⁸
- Post-thinning burning can damage retained trees where coarse woody debris occurs within one metre of the retained stems. Autumn burning has been shown to cause

¹⁸ Bradshaw, F J, (2015) Reference material for karri forest silviculture, Department of Parks and Wildlife, Perth. Page 79.

unacceptable damage to remaining stems and should be avoided and only considered in exceptional circumstances.¹⁹

- The burning of thinning slash has the potential to volatilise more Nitrogen because freshly felled leaves and branches are being burnt. It has been concluded that much of this Nitrogen can be retained by burning in spring under conditions that do not burn the lower Nitrogen-rich component of the litter. A two year delay in burning after thinning will allow time for much of the leaf material in thinning slash to decompose and release its nutrients.²⁰

Therefore, it is considered that restricting burning in the manner suggested by DWER is not practicable and may result in unintended consequences. An alternative condition whereby burning would be limited to spring was put to the applicant who advised the following in response:

...the "spring" burning season in the karri region, as conducted by Parks and Wildlife Services, can extend to well beyond 30 November. I do not want to be restricted to having to complete any burning by 30 November if weather conditions are not conducive to burning. A lot of "spring" burning in the karri region is conducted by [Parks and Wildlife Services] in December and sometimes even in January. However, the Shire of Manjimup sets the limitations on burning by private landholders, under the Bush Fires Act. Generally burning is restricted from around November 9 to December 21, and prohibits burning from December 22 to the following March 14.²¹

The applicant's position is considered reasonable, that is, flexibility should be allowed for burning to occur into December to allow for variations in climatic conditions. It is acknowledged that burning in Spring or December may result in failed breeding attempts by black cockatoos if breeding is occurring. However, it is considered reasonable that fire mitigation burning be allowed on the property in the interests of protecting human life and assets. It is considered that burning at this time is likely to result in less long-term impacts to the vegetation and its associated habitat values than if undertaken in February or autumn.

To further protect retained vegetation from fire damage, it is noted that a key management action implemented by FPC/DBCA is the removal of all fuels greater than 75 mm in diameter and 1 metre in length from a distance of at least 1 metre from retained trees.²² It is considered that a condition requiring as such for retained habitat trees is appropriate for CPS 8460/1. This will further mitigate the risk of damage to black cockatoo habitat values.

It is also noted that the permit conditions do not explicitly limit the application area to only being burnt once. The applicant has advised that burns are proposed to be conducted regularly after the first burn on a 5-7 year cycle. The applicant suggested that these follow up burns are unlikely to require DWER approval and in this regard it is noted that a burning exemption exists in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (i.e. regulation 5, item 3).

Noting the assessment of CPS 8460/1 is based on a single burn, but that condition 4 authorises clearing until 8 April 2025, it is considered that the permit should be amended to make it clear it only authorises the application area to be burnt once. It is the applicant's

¹⁹ Sourced from the following documents:

- Bradshaw, F J, (2015) Reference material for karri forest silviculture, Department of Parks and Wildlife, Perth. Page 79.
- DBCA (2016) Karri silvicultural burning manual. CEM072 Forest Management Series. Version 1.1, 11 June 2018. Pages 24-25.

²⁰ Bradshaw, F J, (2015) Reference material for karri forest silviculture, Department of Parks and Wildlife, Perth. Page 91.

²¹ Correspondence from applicant, received 22 September 2020.

²² FPC (2020). Karri forest management plan. Version 12, March 2020. Page 20.

responsibility to ensure any follow up burns are compliant with the conditions of any exemption or are otherwise in accordance with a clearing permit.

Reconsideration of risk after additional mitigation

In summary, the preceding sections identify that the following measures can be added to the permit to provide additional mitigation of black cockatoo impacts:

- a ground based survey of the application area, undertaken prior to clearing and by an appropriately trained person, to identify trees containing occupied hollows, trees with hollows with clear evidence of use, and trees containing large broken limbs in the upper canopy where there is evidence of fauna activity suggestive of a hollow
- marking, recording and reporting details to DWER prior to clearing of any tree identified by the ground based survey
- avoidance of any tree identified by the ground based survey
- mapping of the forest types present within the application area (e.g. pure karri forest versus mixed karri/marri forest) prior to clearing
- a requirement to ensure the thinning operation does not alter the proportion of the different mapped forest types within the application area
- retention of primary and secondary habitat trees at the rates utilised by DBCA/FPC for each forest type mapped except where this requirement has already been met or exceeded by the retention of trees identified by the ground based survey
- a stipulation that the permit only authorises burning of the application area once and that the burning may only occur during the months of September, October, November or December
- a requirement to, prior to burning, remove all fuels greater than 75 mm in diameter and 1 metre in length from a distance of at least 1 metre from trees identified by the ground based survey and trees retained as primary and secondary habitat trees

These measures were provided to the applicant for comment and the applicant agreed to their inclusion, however, it was submitted that the retention rates of primary and secondary habitat trees should be counted as an average across the application area rather than being counted for each hectare. It is considered that this is an acceptable approach. The applicant was also invited to provide comment on what, in their view, would constitute an appropriately trained person for the ground based survey. In response, the applicant nominated a person to complete the survey. The suitability of that person will be a matter for DWER to determine in monitoring compliance with the permit. It is considered that an appropriately trained person in this case could include someone who holds qualifications and experience relevant for such surveys (e.g. a zoologist) or someone with relevant forestry experience and training.

After implementation of the above measures, and taking into account the site inspection observations, it is considered that the risk of loss of any current black cockatoo breeding habitat from the proposed clearing is low.

It is acknowledged that the thinning and burning will result in the loss of foraging and potential future breeding habitat, however, a substantial amount will remain. As outlined by DWER, the requirement on the permit to retain a minimum 16m²/ha basal area (condition 9(b)) is the equivalent of the retention of approximately 81 trees with a DBH of 500 mm per hectare.

The habitat loss will also not be permanent with the proportional mix of karri and marri to be retained, and natural regeneration expected to occur. Therefore, it is considered that the

proposed clearing, subject to the above additional mitigation measures, is unlikely to result in significant residual impacts to black cockatoos.

Cumulative impacts

On the matter of cumulative impacts, DWER advised the following in response to the appeal:

Cumulative impacts are considered in the assessment of clearing permit applications primarily through clearing principle (e) – *Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.* Through this assessment, the proportion of native remnant vegetation remaining within the wider region (IBRA region) and at a smaller scale, such as local government areas and buffers surrounding application areas is considered. The proportion of vegetation remaining in specific vegetation complexes, and the value of the area as a remnant, such as ecological linkage value, are also considered in the assessment. This assessment allows for the consideration of these smaller areas of clearing, which are reflected in remnant vegetation databases.

... consideration has been given to the context for this Application Area and the value of the vegetation to be cleared in comparison to the quantity and value of the vegetation in the local area and beyond.²³

Consistent with DWER's advice, its *Guide to assessment of applications to clear native vegetation*²⁴ (Guide to Assessment) states that 'the cumulative impacts of clearing within a particular area should be considered' under clearing principle (e). The Guide to Assessment contains examples of where proposed clearing is likely to be at variance, including:

- clearing of native vegetation which contains habitat for a threatened fauna species and is below the national target and objective for biodiversity conservation²⁵
- clearing of biologically diverse remnant vegetation within an extensively cleared landscape
- clearing of remnant vegetation which is part of a significant ecological linkage and is located within an extensively cleared landscape
- clearing in landscapes where the existing vegetation is required to maintain ecosystem services (e.g. hydrological processes), or to compensate for a high degree of fragmentation.²⁶

It has been established that the application area contains habitat for threatened fauna, and DWER's assessment also identified that it forms part of a significant ecological linkage. However, as outlined earlier and as documented in DWER's decision report, the mapped South West Forest vegetation complexes retain well above the 30 per cent extent 'below which species loss appears to accelerate exponentially at an ecosystem level'.²⁷ DWER's decision report also outlines that the application area is unlikely to be biologically diverse (in the context of surrounding vegetation), and is within a local area that retains about 57 per cent native vegetation cover. Given this, it is considered that DWER has had regard for cumulative impacts in its assessment and its finding that the proposed clearing is not likely to be at variance to principle (e) is justified.

²³ DWER response to Appeal 015/20, 10 June 2020, page 8.

²⁴ Department of Environment Regulation (2014) *A guide to the assessment of applications to clear native vegetation – Under Part V Division 2 of the Environmental Protection Act 1986*. December 2014. Government of Western Australia.

²⁵ The Guide to Assessment outlines that the National Objectives and Targets for Biodiversity Conservation 2001-2005 recognise that the retention of 30 per cent or more of the pre-clearing extent of each ecological community is necessary if Australia's biological diversity is to be protected.

²⁶ Guide to Assessment, pages 18-21. Available from: <https://www.der.wa.gov.au/component/k2/item/3985-assessment-of-applications-to-clear-native-vegetation>

²⁷ Decision report for Clearing Permit CPS 8460/1, 9 March 2020, page 6.

Offsets

The WA Environmental Offsets Policy and Guidelines²⁸ provide that offsets may be applied to counterbalance significant residual impacts that remain after avoidance and mitigation measures have been undertaken, and state that applicability will be determined on a case-by-case basis.

In this case, it is considered that additional mitigation measures can be applied whereby significant residual impacts to black cockatoos are unlikely. Therefore, it is considered that an offset, such as a requirement to revegetate habitat elsewhere, is not required for CPS 8460/1.

Conclusion

The investigation found that, as submitted by the appeal, the black cockatoo habitat values of the application area have not been fully quantified. Therefore, there is a risk that the proposed clearing could result in the loss of black cockatoo breeding habitat and alter the proportional values of black cockatoo habitat present (e.g. the proportional area of foraging habitat).

It is considered that these risks can be adequately mitigated through additional conditions requiring:

- mapping of forest types present within the application area prior to clearing and a requirement to ensure the thinning operation does not alter the proportion of the different types mapped
- a ground based habitat tree survey prior to clearing
- avoidance of identified habitat trees
- avoidance of primary and secondary habitat trees at rates documented by DBCA/FPC and based on the mapped forest type (where not already accounted for in the preceding measure)
- removal of fuels greater than 75 mm in diameter and 1 metre in length from within 1 metre of retained habitat trees prior to burning
- burning of the application area no more than once with burning only to be authorised during the months of September, October, November or December

It is considered that the proposed clearing, subject to the above additional mitigation measures, is unlikely to result in significant residual impacts to black cockatoos. It is also considered that DWER had regard for cumulative impacts in its assessment and that an offset, in this case, is not warranted.

GROUND 2: WESTERN RINGTAIL POSSUMS

By this ground of appeal, the appellant submitted that none of the usual permit conditions for managing impacts to WRPs were imposed by DWER. It was submitted that this may represent a shortcoming in DWER's assessment noting the species is listed as critically endangered and that habitat may be cleared.

²⁸ Government of Western Australia (2011) *WA Environmental Offsets Policy* and (2014) *WA Environmental Offsets Guidelines*. Available at: <http://www.epa.wa.gov.au/policies-guidance/wa-environmental-offsets-policy-2011-and-guidelines>

DWER's assessment and response to the appeal

In relation to WRPs, DWER's decision report states:

DBCA (2019) advised that WRP is likely to be present within the application area. Considering this, the vegetation in the application area may contain suitable habitat for WRP.

...

Whilst the vegetation within the application area may provide suitable habitat for WRP... given the local area remains highly vegetated ... and the presence of nearby state forest and national parks, the application area is not likely to be significant habitat for [WRP]. In addition, the clearing is for thinning and the applicant has committed to retain a 16-18m²/hectare basal area and at least two habitat trees per hectare... These actions together with the requirement to undertake clearing in a progressive manner from north to south, will mitigate the likelihood of fauna being injured during the clearing process.²⁹

In response to the appeal, DWER advised:

The Department's site inspection observed that the vegetation in the Application Area may be suitable habitat for WRP. DBCA advised that WRP is likely to be present in the Application Area and recommended to conduct a fauna survey for protection of WRP, a fauna clearance walk to confirm that fauna are not present and/or to flush fauna present out of the Application Area into the adjacent habitat to prevent injury or mortality during clearing, and to undertake the clearing in a direction that allows vertebrate fauna to move away from the clearance activities into adjacent vegetation areas.

A review of relevant GIS datasets identified that there are 16 populations of WRP recorded within the local area, with the closest recorded being approximately 5.2 km northeast of the Application Area ... The Department also took into account that the local area is highly vegetated, with a majority of the vegetation in a similar or better condition conserved in State forests. In addition, noting that the purpose of the clearing was thinning and burning understorey as opposed to broadscale clearing, the Department determined that the proposed clearing would not significantly impact canopy connectivity and the mid and overstorey vegetation, which is fundamental to WRPs as a food source, shelter and protection from predators. The Department also notes that the then Department of Parks and Wildlife (DPaW) document titled *Reference Material for Karri Forest Silviculture* (August 2015) considers timber harvesting and prescribed burning to cause a temporary adverse impact to WRP which can be expected to return to regrowth areas within two to 10 years.

Considering this, the Department believes that a WRP habitat assessment is not required. Condition 11 was imposed on the Clearing Permit requiring the Permit Holder to conduct clearing activities in a slow, progressive manner from north to south to allow fauna to move into adjacent native vegetation ahead of the clearing activity.³⁰

Therefore, DWER is of the view that the directional clearing requirement is sufficient to mitigate impacts to WRPs noting the extent of clearing authorised, and the extent of vegetation remaining within the local area (including within lands managed by DBCA).

Applicant submissions

In response to the appeal, the applicant advised that the property has been under the ownership of his family since the 1950s, and that he has not seen any WRPs on the property since he was a child. The applicant considers that a survey would likely be inconclusive, and, in any case, thinning would leave adequate habitat.

²⁹ Decision report for Clearing Permit CPS 8460/1, 9 March 2020, pages 4-5.

³⁰ DWER response to Appeal 015/20, 10 June 2020, page 9.

Consideration

As outlined in the WRP Recovery Plan, studies have shown that in the years following logging activities, local populations of WRPs have collapsed.³¹ It is unlikely many WRPs will survive intensive timber harvesting operations, however, WRPs will recolonise harvested areas from surviving adjacent populations.³²

A key strategy for conserving WRPs adopted by the FMP is the exclusion of timber harvesting activities from a network of Fauna Habitat Zones (FHZs) and informal reserves (e.g. riparian vegetation areas, buffers to travel routes) from which recolonisation can occur.³³ It is understood that in karri forest, WRPs largely reside in riparian habitat and therefore the risk of impacts to the species from timber harvesting is likely to be low.³⁴

In the case of CPS 8460/1, DWER has imposed condition 10 on the permit which prohibits clearing within 30 metres of riparian vegetation. It is agreed that when combined with the directional clearing requirement (condition 11), these measures are appropriate towards mitigating impacts to WRPs.

However, after reviewing some of the relevant literature on timber harvesting practices associated with the FMP, it is considered that there are several other measures which can be applied to further mitigate impacts.

As outlined under Ground 1, a ground based survey requirement can be added to the permit for the identification and avoidance of trees with hollows. Such trees may be utilised for WRPs as refuge sites and therefore their avoidance will assist in minimising impacts to the species.

Furthermore, DBCA/FPC's standard legacy element retention measures include additional practices designed to provide mitigation for ground-dwelling and arboreal species. These include requirements to retain at least one 30 metre diameter patch of second-storey species per hectare, and to retain coarse woody debris (defined as dead woody material such as boles and branches on the ground) that has characteristics which can provide refuge for fauna.³⁵ These measures will ensure a level of structural complexity remains within the application area providing habitat post-clearing.

To ensure retained coarse woody debris is protected from excessive burning, it is considered that the same protection measures as those utilised for retained habitat trees should also be

³¹ Department of Parks and Wildlife (2017). Western Ringtail Possum (*Pseudocheirus occidentalis*) Recovery Plan. Wildlife Management Program No. 58. Department of Parks and Wildlife, Perth, WA. Page 16.

³² Christensen, P., Liddlelow, G., & Hearn, R. (2005). Assessment of vertebrate fauna prior to disturbance – timber harvesting and prescribed burning in the forests of Western Australia. The Forest Fauna Distribution Information System. October 2005. Page 460.

³³ Department of Parks and Wildlife (2017). Guideline for the Selection of Fauna Habitat Zones. Department of Parks and Wildlife, Forest and Ecosystem Management Series, FEM Guideline No. 6.

³⁴ Christensen, P., Liddlelow, G., & Hearn, R. (2005). Assessment of vertebrate fauna prior to disturbance – timber harvesting and prescribed burning in the forests of Western Australia. The Forest Fauna Distribution Information System. October 2005. Page 460.

³⁵ Sourced from the following documents:

- Department of Parks and Wildlife (2014) Karri – Treemarking for retention. Procedure FEM035. Updated 21 November 2016.
- Department of Parks and Wildlife (2014) Karri – Thinning. Procedure FEM040. Updated 5 May 2016.
- Department of Parks and Wildlife (2014) Karri treemarking ready reckoner. Field Guide CEM039. Updated 25 May 2018.
- Department of Parks and Wildlife (2014) Karri Silviculture Guideline. Sustainable Forest Management Series, FEM Guideline 3. Pages 14-15.
- Burrows, N., Dell, B., Neyland, M. and Ruprecht, J. (2011). Review of silviculture in forests of south-west Western Australia. 22 December 2011. Page 13.

applied (i.e. removal of fuels greater than 75 mm in diameter and 1 metre in length from within 1 metre of retained coarse woody debris).

Therefore, in summary, it is considered that there are several additional measures that can be applied to mitigate impacts to WRPs including:

- a ground based survey of the application area, undertaken prior to clearing and by an appropriately trained person, to identify trees containing occupied hollows, trees with hollows with clear evidence of use, and trees containing large broken limbs in the upper canopy where there is evidence of fauna activity suggestive of a hollow
- marking, recording and reporting details to DWER prior to clearing of any tree identified by the ground based survey
- avoidance of any tree identified by the ground based survey
- retention of at least one 30 metre diameter patch of second-storey species per hectare
- retention of coarse woody debris that is greater than 3 metres long and has a pipe diameter of greater than 10 cm at a rate of at least one per hectare
- a requirement to, prior to burning, remove all fuels greater than 75 mm in diameter and 1 metre in length from a distance of at least 1 metre from retained habitat trees and coarse woody debris

The above measures were provided to the applicant for comment and the applicant agreed to their inclusion, however, it was submitted that the retention rates for patches of second-storey species should be counted as an average across the application area rather than being counted for each hectare. It is considered that this is an acceptable approach. The applicant also submitted that the retention of coarse woody debris is dependent on it being present in the first place. It is agreed that this is the case and it is recommended that the applicant be required to record and report on what was ultimately identified and retained.

Conclusion

The investigation found that there is a risk of impacts to WRPs from the proposed clearing. It was found that this risk is partly mitigated by existing requirements to avoid riparian vegetation and to undertake directional clearing. However, additional conditions, as submitted by the appeal, can be imposed to mitigate impacts further. These include requirements to:

- undertake a ground based habitat tree survey prior to clearing
- retain identified habitat trees
- retain at least one 30 metre diameter patch of second-storey species per hectare
- retain existing coarse woody debris that is greater than 3 metres long and has a pipe diameter of greater than 10 cm at a rate of at least one per hectare (includes associated record keeping and reporting)
- remove fuels greater than 75 mm in diameter and 1 metre in length from within 1 metre of retained habitat trees and coarse woody debris prior to burning

OTHER MATTERS

By their appeal, the appellant submitted that the proposed clearing does not appear to have been referred to the Commonwealth for assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Noting the potential for impacts to black cockatoos, which are listed as matters of national environmental significance (MNES) under

the EPBC Act, the appellant submitted that DWER would be an appropriate authority to advise the applicant of the importance of referral.

The Commonwealth referral guidelines for black cockatoos³⁶ state that the responsibility for deciding whether or not to refer a proposed action to the Commonwealth is with the person proposing the action.

In response to this matter, DWER advised:

The Department recognises that a referral under the EPBC Act should be considered by the Permit Holder. The Department understands that the project was not referred under the EPBC Act. It is the Permit Holder's responsibility to refer to the Commonwealth proposed clearing that may have a significant impact on MNES.³⁷

CONCLUSION AND RECOMMENDATION

The investigation found that, as submitted by the appeal, there is a risk of impacts to black cockatoos and WRPs from the proposed clearing. It was found that permit conditions imposed by DWER are appropriate towards mitigating the risk, but that additional conditions should be imposed to mitigate the risk further.

Taking into account the additional conditions, and that natural regeneration of the application area should occur, it was found that the proposed clearing is unlikely to result in significant residual impacts to black cockatoos and that an offset is not warranted. Therefore, it is considered that a decision to grant the permit is justified.

In coming to this conclusion, it was noted that it is reasonable for fire mitigation burning to be allowed on the property in the interests of protecting human life and assets.

In summary, it is recommended that the appeal be allowed to the extent that additional conditions are imposed requiring:

- mapping of the forest types present within the application area (e.g. pure karri forest versus mixed karri/marri forest) prior to clearing
- maintenance of the proportional coverage of each forest type mapped within the application area
- a ground based survey of the application area, undertaken prior to clearing and by an appropriately trained person, to identify trees containing occupied hollows, trees with hollows with clear evidence of use, and trees containing large broken limbs in the upper canopy where there is evidence of fauna activity suggestive of a hollow
- marking, recording and reporting details to DWER prior to clearing of any tree identified by the ground based survey
- retention of any tree identified by the ground based survey
- retention of primary and secondary habitat trees at rates documented by DBCA/FPC and based on the mapped forest type (except where retention rates are already achieved by the preceding measure) – to be counted as an average across the application area
- retention of at least one 30 metre diameter patch of second-storey species per hectare to be counted as an average across the application area

³⁶ Department of Sustainability, Environment, Water, Population and Communities (2012) *EPBC Act referral guidelines for three threatened black cockatoo species*. Commonwealth of Australia.

³⁷ DWER response to Appeal 015/20, 10 June 2020, page 7.

- retention of existing coarse woody debris that is greater than 3 metres long and has a pipe diameter of greater than 10 cm at a rate of at least one per hectare (includes associated record keeping and reporting)
- removal of fuels greater than 75 mm in diameter and 1 metre in length from within 1 metre of retained habitat trees and coarse woody debris prior to burning
- burning of the application area no more than once with burning only to be authorised during the months of September, October, November or December

Should the Minister determine to uphold the appeal in this way, the final wording of the conditions will be a matter for DWER to determine in giving effect to the Minister's decision under section 110 of the EP Act.

Emma Gaunt
APPEALS CONVENOR

Investigating Officer:
Simon Weighell, A/Senior Appeals Officer