



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

ADVICE NOTE

The funds referred to in condition 1 of this permit are intended for contributing towards the purchase of 14.5 hectares of native vegetation with similar environmental values including Carnaby's cockatoo habitat within the South West or Wheatbelt South areas of Western Australia.

PERMIT DETAILS

Area Permit Number: 7284/1

File Number: 2016/001868-1

Duration of Permit: From 10 August 2017 to 10 August 2019

PERMIT HOLDER

National Lifestyle Villages Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 102 on Deposited Plan 54139, Baldivis

Lot 1 on Diagram 27568, Baldivis

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 5.4 hectares of native vegetation within the area cross hatched yellow on attached Plan 7284/1.

CONDITIONS

1. Monetary contributions to a fund maintained for the purpose of establishing or maintaining vegetation (offset)

Prior to undertaking any clearing authorised under this Permit and no later than 10 August 2018, the Permit Holder shall provide documentary evidence to the CEO that funding of \$81,760 has been transferred to the Department of Water and Environmental Regulation for the purpose of establishing or maintaining native vegetation.

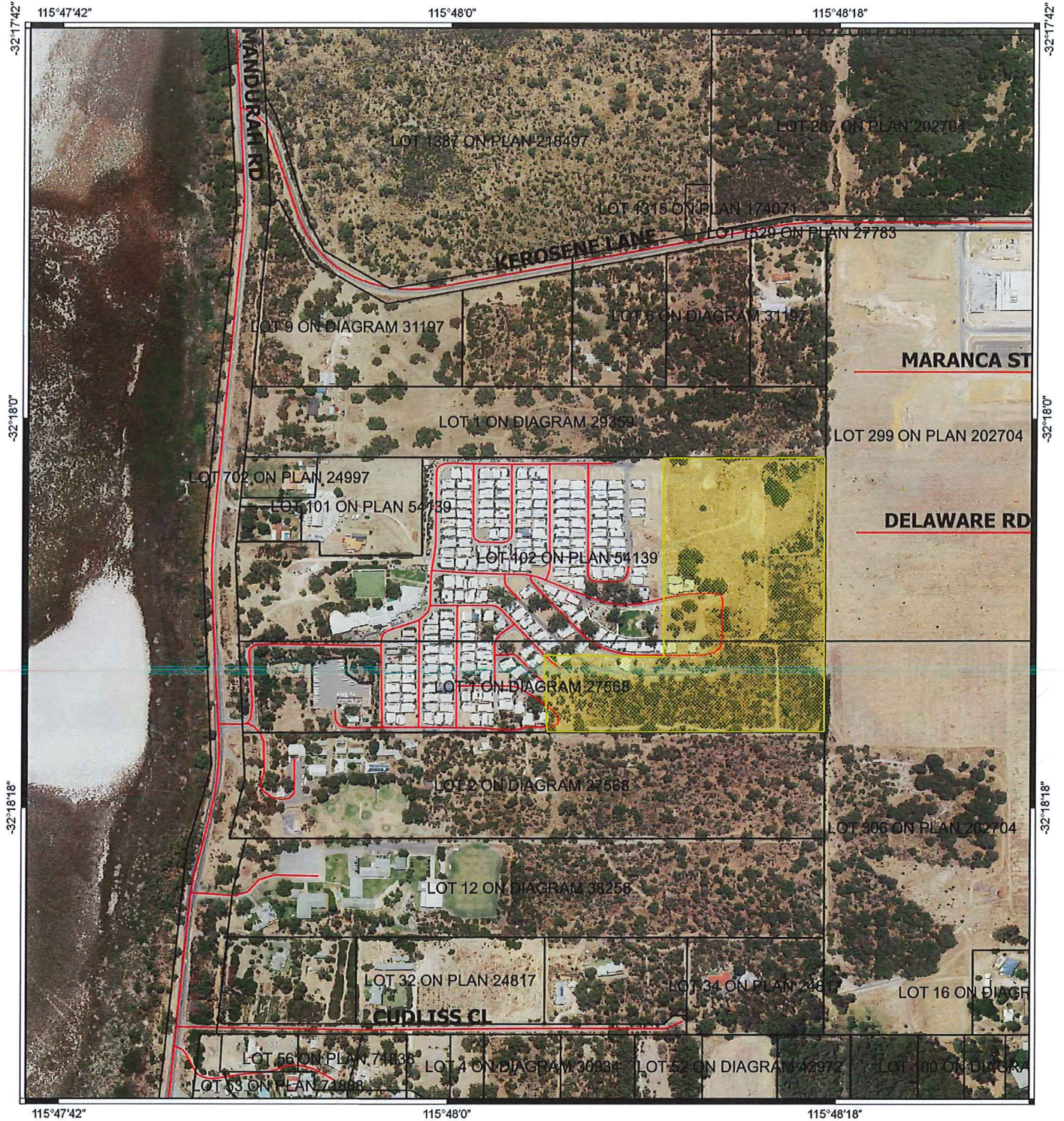
Anne Mathews

Dr Anne Mathews
SENIOR MANAGER
CLEARING REGULATION

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

18 July 2017

Plan 7284/1



Legend

-  Areas approved to clear
 -  Cadastre
 -  Roads
- Virtual Mosaic (LGATE-V001)



1:5,000

MGA 94

Geocentric Datum of Australia 1994

Anne Mathews Date *18/7/2017*

ANNE MATHEWS

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986



**GOVERNMENT OF
WESTERN AUSTRALIA**



1. Application details

1.1. Permit application details

Permit application no.: CPS 7284/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: National Lifestyle Villages Pty Ltd

1.3. Property details

Property: LOT 1 ON DIAGRAM 27568, BALDIVIS
LOT 102 ON DEPOSITED PLAN 54139, BALDIVIS
Colloquial name: Tuart Lakes Lifestyle Village
Local Government Authority: ROCKINGHAM, CITY OF
DER Region: Greater Swan
DPaW District: SWAN COASTAL
Localities: BALDIVIS

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5.4		Mechanical Removal	Building or structure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 18 July 2017

Reasons for Decision: The clearing application, received on 19 September 2016, has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and was concluded that the proposed clearing is at variance to Principle (b) may be at variance to Principles (a), (d) and (g) and is not likely to be at variance to the remaining clearing Principles.

Through assessment it has been determined that;

- the application area contains approximately 3.3 hectares of vegetation which comprises foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*). These species are listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* and have been given the status of endangered or vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999*; and
- approximately 2.7 hectares of native vegetation in Good (Keighery, 1994) condition appears to meet the key diagnostic characteristics of the Commonwealth-listed 'Banksia Woodland of the Swan Coastal Plain' threatened ecological community.

The Delegated Officer has considered the applicant's measures to avoid and minimise impacts, including the retention of large tuart (*Eucalyptus gomphocephala*) trees within the development area. Notwithstanding, the Delegated Officer is of the view that a significant residual environmental impact remains in the form of impacts to the habitat of three species of black cockatoos which, in accordance with the Western Australian Environmental Offsets Policy (2011), should be offset.

The Delegated Officer considered the quantification of the offset required in accordance with the Department of the Environment and Energy's Offset Assessment Guide. The conversion of the minimum spatial offset into a monetary contribution was calculated to be \$81,760. This figure is based on the calculated \$5,621.00 per hectare as average of unimproved value per ha (\$/ha) for a land parcel size of 50 hectares in the South West and Wheatbelt South areas, where it is considered likely for the offset site to be purchased.

The Delegated Officer is satisfied that the environmental impacts associated with this project have been appropriately avoided and minimised, and the significant residual impact has been offset. The Delegated Officer has, therefore, decided to grant this clearing permit.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

The application is to clear 5.4 hectares of native vegetation within Lot 102 on Deposited Plan 54139 and Lot 1 on Diagram 27568, Baldvis, for the purpose of residential development of Tuart Lakes lifestyle village.

Vegetation Description

The application area is mapped as:

- Beard vegetation association 998: Medium woodland; *Eucalyptus gomphocephala* (tuart) (Shepherd et al., 2001); and
- tuart and open forest of tuart - *Eucalyptus marginata* (jarrah) - *Corymbia calophylla* (marri); closed heath on the limestone outcrops (Hedde et al., 1980).

A site inspection undertaken by Strategen in 2016 (**Strategen site inspection**) determined that four vegetation types (VT) as well as parkland cleared, regrowth and clearing areas occur within the application area:

- VT 1 – *Banksia attenuata* (candlestick banksia), jarrah, *Allocasuarina fraseriana* (western sheoak) and tuart woodland over *Acacia pulchella* (prickly Moses) and *Macrozamia riedlei* (zamia) low shrubland over exotic grasses including *Ehrharta calycina* (perennial veldt grass);
- VT 2 – *Acacia rostellifera* (summer-scented wattle) shrubland over exotic grasses including perennial veldt grass;
- VT 3 – jarrah open woodland over prickly Moses, *Banksia sessilis* (parrot bush), *Jacksonia furcellata* (grey stinkwood) and exotic grasses including perennial veldt grass;
- VT 4 – parrot bush, summer-scented wattle and grey stinkwood shrubland over *Desmodium asper* and exotic grasses including perennial veldt grass;
- Parkland Cleared – jarrah over exotic grasses;
- Regrowth – summer-scented wattle over exotic grasses;
- Cleared – cleared of native vegetation and primarily containing introduced pasture grasses (Strategen, 2016).

Vegetation Condition

Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

To

Completely Degraded; The structure of the vegetation is no longer intact and the area is completely or almost completely without native vegetation (Keighery, 1994).

The Strategen site inspection report states that "Vegetation Condition was recorded as Good within VT 1 and VT 2, Good-Degraded in VT 4, Degraded-Completely Degraded within VT 3 and Completely Degraded within the parkland cleared and regrowth areas ..." (Strategen, 2016).

A site inspection undertaken by former Department of Environment Regulation (DER) officers in November 2016 (**DER site inspection**) determined that the condition of the vegetation within the application area ranges from Good to Completely Degraded (DER, 2016).

Comment

The DER site inspection determined the vegetation within the application area to be predominately a candlestick banksia – western sheoak woodland with some jarrah present (DER, 2016). The understorey consists largely of exotic grasses with interspersed native species including *Gompholobium* sp., *Hibbertia* sp., *Acacia* sp., *Macrozamia* sp., *Hardenbergia* sp. and *Conostylis* sp., and evidence of recruitment occurring within the candlestick banksia – western sheoak woodland (DER, 2016).

The condition and structure of the vegetation within the application area was determined from the Strategen site inspection and the DER site inspection (Strategen, 2016; DER, 2016).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposed clearing may be at variance to this Principle

The application is to clear 5.4 hectares of native vegetation within Lot 102 on Deposited Plan 54139 and Lot 1 on Diagram 27568, Baldvis, for the purpose of residential development of Tuart Lakes lifestyle village. The application area is indicated by the area cross-hatched blue in Figure 1.

Figure 1: Map of application area



The local area considered in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area.

According to available databases, twelve priority flora have been recorded within the local area. Of these, none have been mapped within the same vegetation and soil types as found within the application area. The Strategen site inspection report states "No species listed as Priority were identified within the surrounding area" (Strategen, 2016).

Of the rare flora species recorded within the local area, none have been mapped within the same vegetation and soil types as found within the application area. Rare flora are assessed in more detail under Principle (c).

Of the fauna species of conservation significance recorded within the local area, three black cockatoo species are likely to utilise the application area. Fauna are assessed in more detail under Principle (b).

According to available databases, six priority ecological communities (PEC) have been recorded within the local area. Of these, none have been mapped within the same vegetation and soil types as found within the application area. The Strategen site inspection report states "No ... PECs are inferred to occur within the Survey Area due to the degraded condition of vegetation" (Strategen, 2016).

Of the threatened ecological communities (TEC) recorded within the local area, the application area may contain the endangered TEC 'Banksia Woodlands of the Swan Coastal Plain'. TECs are assessed in more detail under Principle (d).

Given the above, the application area may comprise a high level of biological diversity. The proposed clearing may be at variance to this Principle.

Methodology

References:

DER (2016)
Strategen (2016)

GIS Databases:

- Carnabys cockatoo Feeding SCP Unconfirmed
- Carnabys cockatoo Roost Areas Confirmed
- NLWRA, Current Extent of Native Vegetation
- SAC BioDatasets (Accessed December 2016)

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposed clearing is at variance to this Principle

According to available databases, 17 threatened fauna, 18 fauna protected under international agreement, two other specially protected fauna and 13 priority fauna have been recorded within the local area (10 kilometre radius) (Parks and Wildlife, 2007-). A number of these species are associated with marine environments.

The application area is located within a mapped unconfirmed feeding area for Carnaby's cockatoo (*Calyptorhynchus latirostris*), and the northern portion of the application area intersects a mapped confirmed Carnaby's cockatoo roost site.

A site inspection undertaken by DER officers in November 2016 identified that the application area contains a number of mature jarrah and tuart, and evidence of fauna scats and diggings and cockatoo foraging on *Banksia* sp. cones (DER, 2016).

The Strategen site inspection determined that three black cockatoo species have a possible likelihood of occurrence within the application area due to the presence of known foraging, breeding and roosting habitat, and that the application area contains 3.3 hectares of moderate quality foraging habitat. The Strategen site inspection report states "All significant *Eucalyptus gomphocephala* trees within the Survey Area have been marked for retention, thereby reducing the area of cockatoo habitat loss" (Strategen, 2016).

The application area is likely to contain significant habitat for Carnaby's cockatoo, Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*).

Carnaby's cockatoo is listed as endangered and Baudin's cockatoo and forest red-tailed cockatoo are listed as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). These species nest in hollows in live or dead trees of tuart, jarrah, marri, *Eucalyptus diversicolor* (karri), *Eucalyptus wandoo* (wandoo), *Eucalyptus salmonophloia* (salmon gum), *Eucalyptus rudis* (flooded gum), *Eucalyptus loxophleba* (York gum), *Eucalyptus accedens* (powder bark), *Eucalyptus megacarpa* (bullich) and *Eucalyptus patens* (blackbutt) (Commonwealth of Australia, 2012). Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012).

Noting the mapped vegetation types, the condition of the vegetation within the application area, and that suitable foraging habitat was found within the application area, the application area is likely to comprise a significant habitat for three conservation significant species of black cockatoo. The proposed clearing is at variance to this Principle.

Methodology References:
Commonwealth of Australia (2012)
Parks and Wildlife (2007-)
DER (2016)
Strategen (2016)

GIS Databases:
- Carnabys cockatoo Feeding SCP Unconfirmed
- Carnabys cockatoo Roost Areas Confirmed
- SAC BioDatasets (Accessed December 2016)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposed clearing is not likely to be at variance to this Principle**
According to available databases, four rare flora species have been recorded within the local area.

The Strategen site inspection report states that ENV Australia found that "clearing would have a minimal impact upon the botanical values within the development area due to ... the vegetation encountered is not necessary for the continued existence of any significant flora" (Strategen, 2016). The Strategen site inspection report states "The lack of vegetation structure evident and an understorey comprised of invasive weed species indicate that none of the conservation species listed ... are likely to be present" (Strategen, 2016).

None of the rare flora species recorded within the local area have been found within the same soil and vegetation types as found within the application area. The application area is not likely to include, or be necessary for the continued existence of, rare flora. The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
Strategen (2016)

GIS Databases:
- SAC BioDatasets (Accessed December 2016)

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposed clearing may be at variance to this Principle**
According to available databases, seven TECs have been mapped within the local area (10 kilometre radius).

The Strategen site inspection report states that ENV Australia found that "clearing would have a minimal impact upon the botanical values within the development area due to ... flora of the site does not comprise a community type in need of any special protection" (Strategen, 2016). The Strategen site inspection report states "No TECs ... are inferred to occur within the Survey Area due to the degraded condition of vegetation" (Strategen, 2016). Notwithstanding, the Strategen site inspection report identified approximately 2.9 hectares of the application area as 'VT 1', comprising candlestick banksia, jarrah, western sheoak and tuart woodland over prickly Moses and zamia (Strategen, 2016).

On 16 September 2016, the Commonwealth Department of the Environment and Energy (DotEE) listed 'Banksia Woodlands of the Swan Coastal Plain' as an endangered TEC under the EPBC Act. DotEE has released a map of the indicative present distribution of the TEC, defining areas mapped as 'likely to occur' or 'may occur'. The Approved Conservation Advice for this TEC states "Ground-truthing (e.g. an on-ground survey) is required to verify if a particular site meets the required key diagnostic characteristics and minimum condition thresholds to be the described ecological community" (Threatened Species Scientific Committee, 2016).

The Approved Conservation Advice for the TEC states that to be considered representative of the TEC a remnant in the Swan Coastal Plain bioregion must include at least one of four *Banksia* species being candlestick banksia, *Banksia menziesii* (firewood banksia), *Banksia prionotes* (acorn banksia) and/or *Banksia illicifolia* (holly-leaved banksia); must include an emergent tree layer often including marri, jarrah, or tuart, and other medium trees including *Eucalyptus tottiana* (pricklybark), *Nuytsia floribunda* (WA Christmas tree), western sheoak, *Callitris arenaria* (sandplain cypress), *Callitris pyramidalis* (swamp cypress) or *Xylomelum occidentale* (woody pear); and must include an often highly species-rich understorey (Threatened Species Scientific Committee, 2016).

Condition thresholds provide guidance on when a patch of an ecological community retains sufficient conservation values to be considered a 'Matter of National Environmental Significance', as defined under the EPBC Act, and to be considered as part of the TEC minimum patch sizes by condition (Keighery, 1994) are 'pristine' – no minimum patch size applies; 'excellent' – 0.5 hectares; 'very good' – 1 hectare; 'good' – 2 hectares (Threatened Species Scientific Committee, 2016).

The former Department of Parks and Wildlife (**Parks and Wildlife**) advised that based on the information provided it is possible that two patches of VT 1 in Good condition totalling approximately 2.7 hectares meet the key diagnostic characteristics (landform, structure and composition) and condition thresholds (including the minimum condition and patch size) outlined in the Approved Conservation Advice (Parks and Wildlife, 2017). Parks and Wildlife advised that one of the major threats to the TEC includes the clearing of native vegetation and fragmentation, notably for urban development, and that areas considered critical to the survival of the *Banksia* woodlands covers all patches that meet the key diagnostic characteristics and condition thresholds for the TEC plus buffers (Parks and Wildlife, 2017). Parks and Wildlife advised that further survey work is required to determine the full species list for vegetation in Good or better condition (Parks and Wildlife, 2017).

Noting the above, approximately 2.7 hectares of the vegetation within the application area is mapped as candlestick banksia – western sheoak woodland and is in a Good condition. The application area is mapped within an area in which DotEE considers this TEC is 'likely to occur'. Noting this, the application area may comprise, or be necessary for the maintenance of, an occurrence of the endangered TEC 'Banksia Woodlands of the Swan Coastal Plain'. The proposed clearing may be at variance to this Principle.

Given the above, the proposed clearing may be at variance to this Principle.

Methodology References:
DER (2016)
Parks and Wildlife (2017)
Strategen (2016)
Threatened Species Scientific Committee (2016)

GIS Databases:
- SAC BioDatasets (Accessed December 2016)

(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.

Comments Proposed clearing is not likely to be at variance to this Principle

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The Environmental Protection Authority (EPA) recognises the Perth Metropolitan Region to be a constrained area, within which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008).

The application area is located within the mapped extent of the Perth Metropolitan Region Scheme. Noting that the EPA considers a constrained area to be an area where there is an expectation that development will proceed, and that the cleared area is zoned 'Urban' in the Perth Metropolitan Region Scheme, the 10 per cent threshold applies in this instance.

As indicated in Table 1, the remaining extents of native vegetation within the bioregion, local government authority and local area are above the minimum 10 per cent representation threshold for a constrained area.

The application area contains significant foraging habitat for Carnaby's cockatoo and may contain a TEC. The application area forms a fragmented linkage between remnant vegetation to the north and south of the application area, and the proposed clearing is likely to sever this connection. On this bases the application area may be significant as a remnant of native vegetation. Noting the condition of the vegetation and predominance of trees within the application area, and the proposed retention of a number of trees within the application area, the proposed clearing is not likely to have a significant environmental impact in this regard.

Noting the above, the application area is not likely to be significant as a remnant of vegetation within an area that has been extensively cleared. The proposed clearing is not likely to be at variance to this Principle.

Table 1: Vegetation extents

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Department of Parks and Wildlife Managed Lands		
				Extent (ha)	Pre-European (%)	Current (%)
IBRA bioregion¹						
Swan Coastal Plain	1,501,221	579,161	38.5	217,142	17.6	37.5
Local government authority¹						
City of Rockingham	26,335	7,482	28.4	827	5.9	11.1
Beard vegetation association in bioregion¹						
998	50,867	18,603	36.6	9,389	18.5	42.6
Hedde vegetation complex²						
Cottesloe Complex – Central And South	45,299	15,026	33.2	5,881.9		12.9
Local area						
10 kilometre radius			35			

Methodology References:
 Commonwealth of Australia (2001)
²Parks and Wildlife (2015)
 EPA (2008)
¹Government of Western Australia (2015)

GIS Databases:
 - Metropolitan Region Scheme - Zones and Reserves
 - NLWRA, Current Extent of Native Vegetation
 - Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposed clearing is not likely to be at variance to this Principle**
 According to available databases, the local area (10 kilometre radius) contains:

- a conservation category wetland (dampland) located approximately 400 metres from the application area;
- a major tributary associated with Lake Cooloongup located approximately 439 metres from the application area; and
- a lake located approximately 531 metres from the application area.

No watercourses or wetlands are located within the application area.

The Strategen site inspection report states "Vegetation within the Survey Area is not located within the mapped bounds of a wetland", "... vegetation within the proposed clearing does not contain values pertaining to a conservation significant wetland", and "The flora species ... within the subject lot are not representative of a typical wetland within the area" (Strategen, 2016).

The vegetation types found within the application area are terrestrial and are not consistent with riparian vegetation (DER, 2016). The application area is not likely to contain vegetation growing in, or in association with, an environment associated with a watercourse or wetland. The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
 DER (2016)
 Strategen (2016)

GIS Databases:
 - Geomorphic Wetlands, Swan Coastal Plain
 - Hydrography, linear
 - Hydrography, hierarchy

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposed clearing may be at variance to this Principle**
 The application area is mapped as soil type B24, which is described as: Undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites (Northcote et al., 1960-68). The local area has a relatively flat topography.

Noting the sandy soils and relatively flat topography of the application area, in the short-term the proposed clearing may cause land degradation in the form of wind erosion between clearing and development. The proposed clearing may be at variance to this Principle.

Methodology References:
Northcote et al. (1960-68)

GIS Databases:
- Acid Sulfate Soil Risk Map, Swan Coastal Plain
- Groundwater Salinity, Statewide
- Soils, statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposed clearing is not likely to be at variance to this Principle**

According to available databases, the local area (10 kilometre radius) contains:

- Bush Forever Site 356 located approximately 304 metres from the application area, which includes the Rockingham Lakes Regional Park and a conservation category wetland;
- Bush Forever Site 349 located approximately 1,561 metres from the application area; and
- Bush Forever Site 495 located approximately 2,619 metres from the application area.

The Strategen site inspection report states "The Survey Area does not fall within any Conservation Category wetlands or Bush Forever sites. Bush Forever site 356 and Cooloongup Land Conservation wetland (UFI 6385) are located approximately 0.4 km from the Survey Area ..." (Strategen, 2016).

Bush Forever Site 356 is separated from the application area by residential development and roads. Noting this, the proposed clearing is not likely to have an impact on the environmental values of any nearby conservation areas. The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
Strategen (2016)

GIS Databases:
- Bushforever Sites
- Geomorphic Wetlands, Swan Coastal Plain
- Parks and Wildlife, Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposed clearing is not likely to be at variance to this Principle**

Noting the absence of watercourses and wetlands, and the presence of sandy soils and relatively flat topography within the application area, the proposed clearing is not likely to cause deterioration in surface water quality.

Groundwater salinity is mapped between 500-1,000 total dissolved solids (milligrams per litres). Noting the extent of the proposed clearing, the proposed clearing is not likely to contribute to an increase in groundwater salinity or cause deterioration in groundwater quality.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
- Acid Sulfate Soil Risk Map, Swan Coastal Plain
- Hydrography linear
- Soils, statewide
- Groundwater Salinity, Statewide

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

Comments **Proposed clearing is not likely to be at variance to this Principle**

Noting the absence of watercourses and wetlands, the relatively flat topography of the local landscape, and predominance of well drained sandy soils within the application area, the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding. The proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases:
- Hydrography linear
- Soils, statewide
- Topographic Contours, Statewide

Planning instruments and other relevant matters.

Comments

On 19 September 2016, the former DER received an application from National Lifestyle Villages Pty Ltd to clear 5.4 hectares of native vegetation with a 9.2 hectare development footprint on Lot 1 on Diagram 27568, Lot 3 on Diagram 30054, Lot 700 on Diagram 87766 and Lot 703 on Plan 24997, Baldivis, for the purpose of residential development of Tuart Lakes Lifestyle Village.

Lot 3 and a portion of Lot 703 were amalgamated into Lot 102 on Deposited Plan 54139. The registered proprietor of Lot 1 and Lot 102 is Tuart Lakes Lifestyle Village Pty Ltd (a subsidiary of the applicant). The application area does not extend into Lot 700.

The application area partly overlaps areas previously approved to be cleared by Clearing Permit CPS 1768/1 (5.45 hectares on Lot 1; expired 11 June 2009) and Clearing Permit CPS 1769/1 (2.27 hectares on Lot 3; expired 11 June 2009).

The application area is located within the Stakehill Groundwater Area (Tamworth Swamp sub-area) as proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act). The former Department of Water (DoW) advised that the applicant has an existing groundwater licence over the application area, that there is limited groundwater available in the Tamworth Swamp sub-area. Should the applicant wish to increase their allocation, an amendment to the existing groundwater licence is required and any new groundwater bores will require a licence to construct under section 26 of the RiWI Act (DoW, 2016).

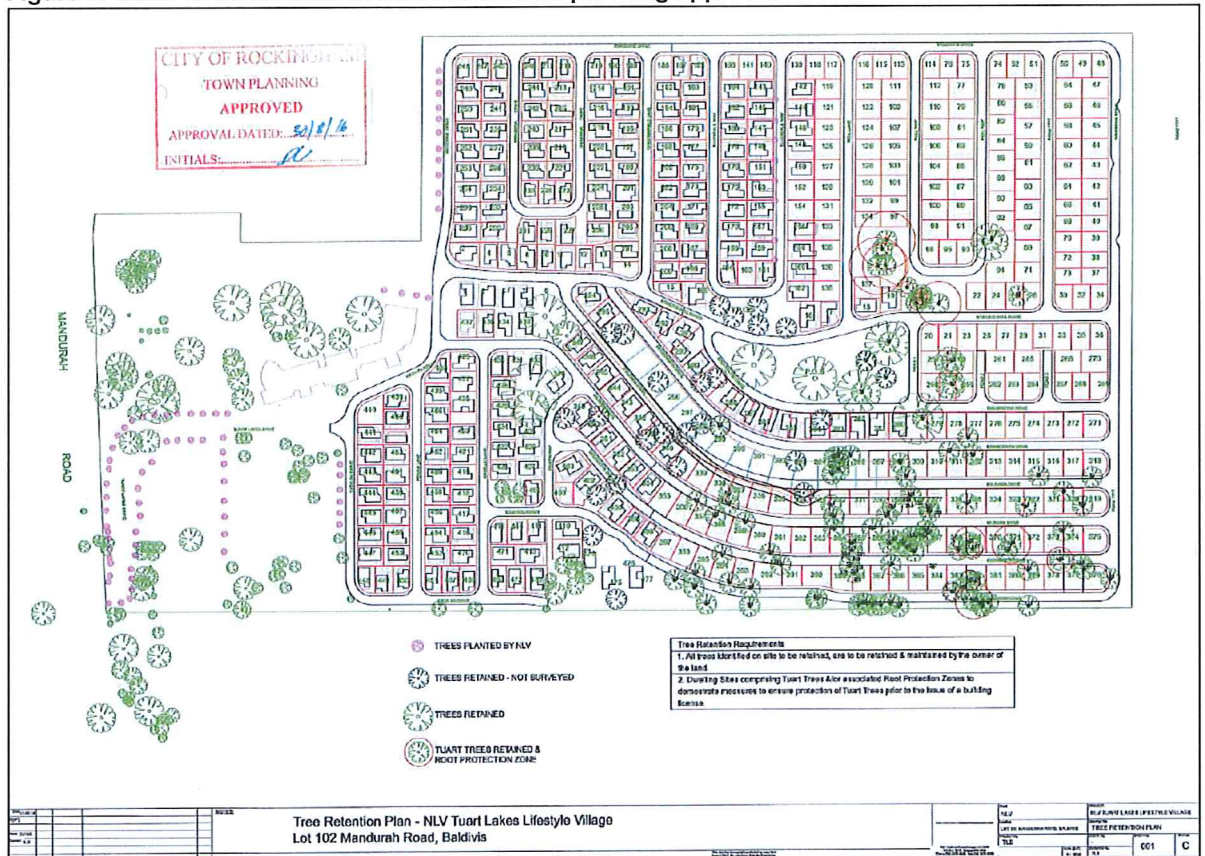
No Aboriginal sites of significance are mapped within the application area.

The application was accepted on 17 October 2016. The application was advertised in *The West Australian* newspaper on 17 October 2016 for a 21-day submission period. No public submissions were received in relation to the proposed clearing.

On 18 December 2016, DotEE received a referral from Tuart Lakes Lifestyle Village Pty Ltd (a subsidiary of National Lifestyle Villages Pty Ltd) to clear 5.4 hectares of native vegetation within a 9.2 hectare area on Lots 1, 3, 700 and 703 Mandurah Road, Baldivis, for expansion of the existing Tuart Lakes lifestyle village (2016/7850). On 28 March 2017, DotEE advised that the proposed clearing was determined not to be a controlled action.

The application area is located within the City of Rockingham, and is zoned 'Development – DA30' in the City of Rockingham Town Planning Scheme No.2 and 'Urban' in the Metropolitan Region Scheme. The City of Rockingham advised that the proposed clearing is in accordance with the planning approval issued by it for the site, subject to the retention of identified trees (City of Rockingham, 2016). The City of Rockingham planning approval requires the retention of a number of trees within the application area in accordance with the applicant's *Tree Retention Plan* (approved by the City of Rockingham on 30 August 2016; refer Figure 2).

Figure 2: Trees to be retained in accordance with planning approval



Methodology References:
City of Rockingham (2016)
DoW (2016)

GIS Databases:
- Aboriginal Sites Register System

4. Applicant's Submission

Comments On 24 March 2017, a DER Delegated Officer wrote to the applicant, outlining the environmental impacts identified during the preliminary assessment and inviting the applicant to provide advice addressing these issues and information on how the applicant intends to avoid or minimise the impacts and offset unavoidable impacts, within 30 days. The issues outlined in the letter included:

- The application area contains approximately 3.3 hectares of foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*). These species are listed as endangered and vulnerable under the *Wildlife Conservation Act 1950* and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- The application area contains approximately 2.7 hectares of native vegetation described as '*Banksia attenuata*, *Eucalyptus marginata*, *Allocasuarina fraseriana* and *Eucalyptus gomphocephala* woodland over *Acacia pulchella* and *Macrozamia riedlei* low shrubland over exotic grasses including **Ehrharta calycina*' in Good condition, which appears meets the key diagnostic characteristics of the 'Banksia Woodland of the Swan Coastal Plain' threatened ecological community (TEC) listed as endangered under the EPBC Act.
- In order to inform assessment of the potential impacts to a TEC, a targeted flora and vegetation survey conducted by suitably qualified person is required to determine the presence or absence of the TEC and the extent of impacts as a result of the proposed clearing.

On 11 April 2017, the applicant wrote to DER in response to the Delegated Officer's letter of 24 March 2017 (DER ref: A1433415). The applicant advised:

- On 28 March 2017, DotEE advised that the proposed action is not a controlled action and does not require further assessment or approval under the EPBC Act;
- Noting that the 'Banksia Woodland of the Swan Coastal Plain' TEC is a Commonwealth-listed TEC, the presence of the 'Banksia Woodland of the Swan Coastal Plain' TEC is not relevant to DER's assessment and a targeted flora and vegetation survey is unnecessary; and
- That the black cockatoo habitat is of 'moderate' value, and that *Eucalyptus gomphocephala* trees are to be retained in accordance with the tree retention plan approved by the City of Rockingham.

It is noted that the Commonwealth considers matters of national environmental significance and the State considers a broader range of environmental values. It is also noted that while DotEE determined that the proposal is not a controlled action, DotEE did not state that the proposal would not impact foraging habitat for three threatened species of black cockatoo or that the vegetation present does not meet the key diagnostic characteristics of the TEC.

On 9 June 2017 and 30 June 2017, meetings were held with the applicant to discuss the identified environmental impacts, avoidance and minimisation measures and offset requirements.

5. Assessment of suitability of proposed offset

Comments After taking into account the applicant's avoidance and mitigation measures, the significant residual environmental impact to native vegetation identified through this assessment is:

- the application area contains approximately 3.3 hectares of vegetation in which comprises foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*).

To counterbalance the residual environmental impact of the proposed clearing, the applicant proposed an offset comprising a financial contribution towards the purchase of remnant vegetation in 'Very Good' condition.

Assessment of the suitability of the applicant's proposed offset was undertaken using the DotEE's Offset Assessment Guide. This calculation indicated that the minimum spatial offset to be achieved through land acquisition is approximately 14.5 hectares (based on 3.3 hectares of Carnaby's cockatoo habitat).

The conversion of the minimum spatial offset into a monetary contribution was calculated to be \$81,760. This figure is based on the calculated \$5,621.00 per hectare as average of unimproved value per ha (\$/ha) for a land parcel size of 50 hectares in the South West and Wheatbelt South areas.

6. References

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