



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 8186/1
File Number: DER2018/001426
Duration of Permit: From 27 May 2019 to 27 May 2021

PERMIT HOLDER

Paris Grove Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 4257 on Deposited Plan 202951, Kentdale

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.5 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8186/1.

CONDITIONS

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

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

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

2. Dieback and weed control

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

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

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and
- (e) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 2 of this Permit.

4. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 3 of this Permit, when requested by the *CEO*.

DEFINITIONS

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

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

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

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

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

weed/s means any plant -

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

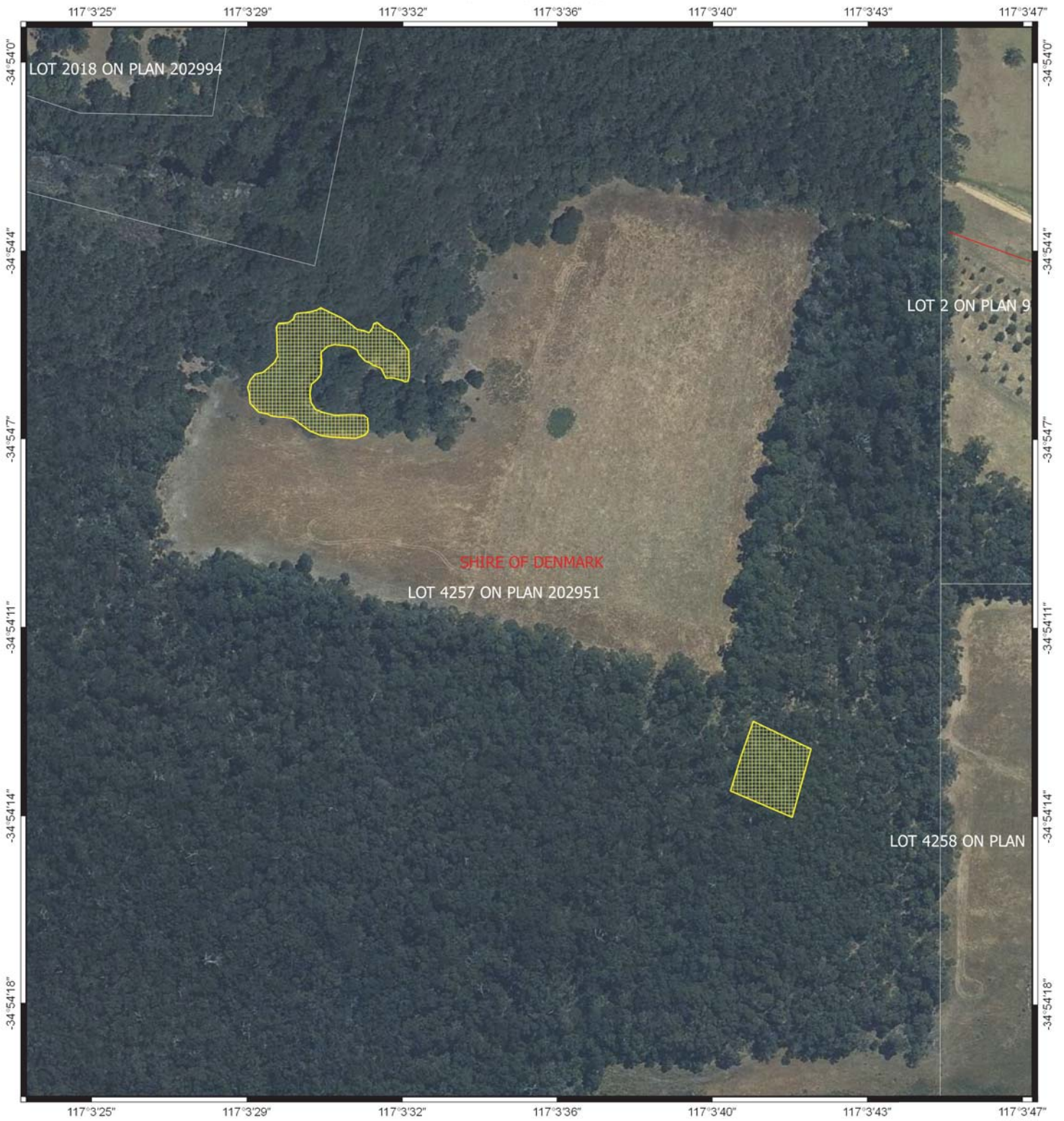


Samara Rogers
MANAGER
NATIVE VEGETATION REGULATION

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

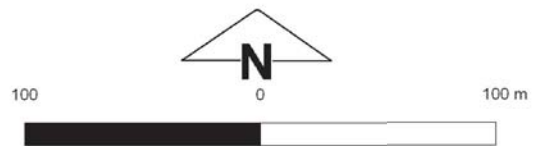
2 May 2019

Plan 8186/1



Legend

-  CPS areas approved to clear
-  Cadastre
-  Roads
-  Local Government Authorities
- Image



MGA 94
Geocentric Datum of Australia 1994

Samara Rogers

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



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

Permit application details

Permit application No.: 8186/1
Permit type: Area Permit

Applicant details

Applicant's name: Paris Grove Pty Ltd
Application received date: 6 September 2018

Property details

Property: Lot 4257 on Deposited Plan 202951, Kentdale
Local Government Authority: Shire of Denmark
Localities: Kentdale

Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		Mechanical Removal	Hazard reduction and fire control

Decision on application

Decision on Permit Application: Grant
Decision Date: 2 May 2019
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to principle (f), may be at variance to clearing principle (h), and is not likely to be at variance to the remaining clearing principles.

Through assessment it was identified that vegetation in the application area is growing in an environment associated with a watercourse. Given the reduction in area from 1.56 hectares to 0.5 hectares, the proposed clearing is not likely to be significant.

In determining to grant a clearing permit, the Delegated Officer determined that potential impacts to adjacent vegetation and conservation areas can be adequately minimised and/or avoided by imposing weed and dieback management.

The Delegated Officer determined that the proposed clearing is unlikely to lead to any unacceptable risk to the environment.

2. Site Information

Clearing Description

The application is to clear 0.5 hectares of native vegetation within Lot 4257 on Deposited Plan 202951, Kentdale, for the purposes of reducing fire risk around site of proposed dwelling, to enable majority of pasture to be retained and to locate gravity feeding water tanks. The applicant has advised that he will retain all large trees within the application area where possible.

Vegetation Description

The vegetation within the application area is mapped as the following Matiske vegetation complex's:
Collis 1, COy1: Tall open forest to woodland of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla*-*Banksia grandis*-*Allocasuarina fraseriana* on low hills and with *Allocasuarina decussata* on slopes in perhumid and humid zones; and as
Granite Valleys, Vh2: Tall open forest of *Eucalyptus diversicolor*-*Eucalyptus patens* on slopes with *Agonis flexuosa*-*Allocasuarina decussata* -*Callistachys lanceolata* on valley floors in hyperhumid and perhumid zones (Matiske and Havel, 1998).

Vegetation Condition

Excellent; Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species (Keighery, 1994);
to
Very good; Vegetation structure altered, obvious signs of disturbance (Keighery, 1994).

The vegetation condition of the application area was determined through a site inspection undertaken by the Department of Water and Environmental Regulation (DWER) officers on 20 November 2018 (DWER, 2018a).

Soil and Landform Type:

The application area is mapped as the following soil types:
Major Valleys V2 Subsystem (Walpole), described as valleys in granitic areas; 20-40 m relief; smooth, moderate slopes; narrow terrace (Mapping unit: 254WhV2) (the northern application area); and as
Collis yellow duplex Phase, described as gravelly yellow duplex soils; Jarrah-Marri forest (Mapping unit: 254WhCOy) (the southern application area (DPIRD, 2017)).

Comments:

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area. The local area contains approximately 68 per cent native vegetation cover.

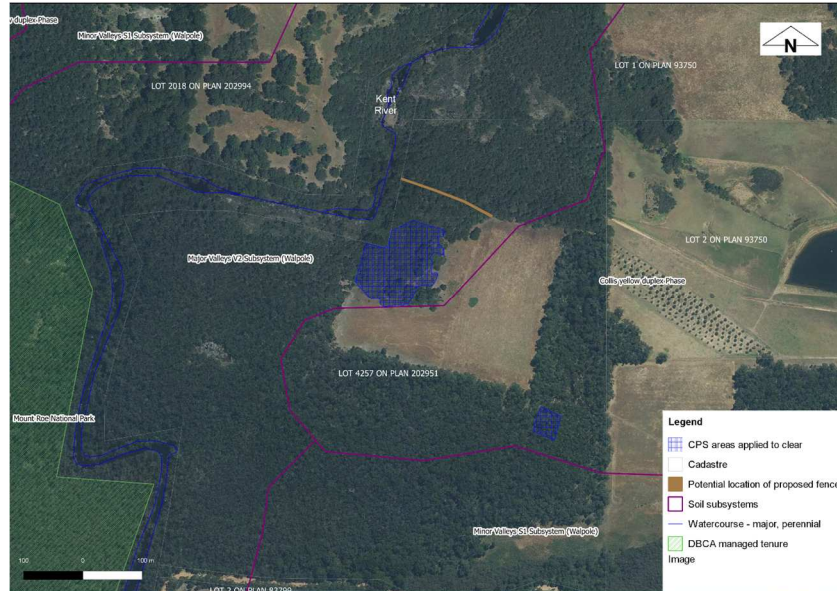


Figure 1: Original application area and surrounding environmental attributes



Photo 1: View of the proposed site for gravity feeding water tanks showing juvenile trees with predominant bracken fern understorey; vegetation in very good condition



Photos 2: Area of the proposed dwelling overlooking west; vegetation in very good condition



Photo 3: Riparian vegetation (*Gahnia decomposita*) within the buffer to the Kent River adjacent to the northern application area.

Photo 4: The view of the Kent River overlooking west from within the northern application area

Figure 2: Photographs of the application area and its surrounds

3. Avoidance and minimisation measures

The original application was proposing to clear 1.56 hectares of native vegetation within Lot 4257 on Deposited Plan 202951, Kentdale, for the purposes of reducing fire risk around site of proposed dwelling, to improve access to fence/boundary line, to enable majority of pasture to be retained and to locate gravity feeding water tanks.

The preliminary assessment identified that the original application area was approximately 38 metres from the Kent River and within the waterway's buffer area. The Kent River flows into Irwin Inlet, a regionally significant estuary. The nationally significant wetland system listed in the Directory of Important Wetlands (DIWA), Owingup Swamp System, also lies less than 5 kilometres downstream (DWER, 2019).

The DWER's Science and Planning division, South Coast Region advised that clearing of remnant vegetation within the buffer of a waterway is not acceptable and alternative options should be sought to avoid clearing within this sensitive area (DWER, 2018b).

The DWER's South Coast Region further advised "catchment vegetation provides a valuable role with protecting catchment areas and downstream water quality values. Downstream waterways may be impacted by erosion, sedimentation and turbidity where vegetation is removed. Clearing of remnant vegetation within buffer areas of waterways should be avoided and retention of catchment vegetation is encouraged. These measures provide for long term protection and management of catchments and their waterways and sustainable management of water resources as environmental assets" (DWER, 2018b).

DWER's River Science division advised that the proposed clearing of remnant and riparian vegetation associated with the Kent River has the potential to impact on water quality through increased sediment and nutrient runoff to the river. Two native species of conservation significance have been recorded in the waterways downstream of the clearing proposal and a nationally significant wetland system listed in the Directory of Important Wetlands (DIWA), Owingup Swamp System, lies less than 5 kilometres downstream, which includes about 10 kilometres of the Kent River upstream of the swamp. The northern-most part of the DIWA listed wetland is only about 5 kilometres downstream of the proposed clearing, while the swamp itself is about 14 kilometres downstream of the application area (DWER, 2019).

'The health of Owingup swamp is largely dependent upon two things – the quality of the water entering the wetland and the health of the riparian vegetation and surrounding bushland, the two being closely linked. The quality of the water entering the system is mainly dependent upon that flowing from the Kent River. As discussed earlier riparian vegetation plays an important role in buffering the river from nutrients. This ability diminishes as the riparian flora becomes degraded through inappropriate stock access or clearing' (Gillespie, 2006).

DWER's River Science division recommends that 'there is no clearing of riparian vegetation associated with the Kent River and that any wetland vegetation associated with minor drainage lines or water logged areas connected to the Kent River is also protected. the riparian vegetation/foreshore area should include an additional 10 metre width of non-riparian/upland vegetation and be fenced to excluded livestock, measures to minimise the impact of rural activities on the foreshore vegetation and its functions in protecting the waterway' (DWER, 2019).

The preliminary assessment of the original application area identified that the proposed clearing of 1.56 hectares was likely to have downstream impacts on a nationally significant wetland system listed in the Directory of Important Wetlands (DIWA), Owingup Swamp System (DWER, 2019). Due to the proximity to these sensitive receptors, DWER wrote to the applicant requesting for avoidance and mitigation measures.

Based on the assessment, the applicant reduced the application area to 0.5 hectares (Grist, 2019a) avoiding the waterway's buffer area and maintaining approximately a 75 metre buffer from the Kent River. DWER considers this as an appropriate distance from the waterway, given the observations from DWER site inspection indicating that clearing within the modified application area is unlikely to lead to an unacceptable risk to the environment.

The applicant also indicated that he will not undertake any clearing for installing the fence and will work around the vegetation along an existing olden fence line (Grist, 2019b).

The applicant has also proposed to retain all large trees within the application area and had undertaking infill planting of karri trees within the application area and elsewhere on the property (DWER, 2018a).

4. Assessment of application against clearing principles

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

Proposed clearing is not likely to be at variance to this principle

The northern application area (site of proposed dwelling) comprise predominately of tall open forest of jarrah-marri-karri-blackbutt trees (*Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla*-*Eucalyptus diversicolor*- *Eucalyptus patens*), with a rich native understorey, which includes areas of *Gahnia decomposita* and *melaleuca* sp. mid/under storey, in excellent to very good condition (DWER, 2018a). The southern application area (site of proposed water tanks) include juvenile jarrah (*Eucalyptus*

marginata subsp. *marginata*) and juvenile karri (*Eucalyptus diversicolor*) trees with understorey comprising mainly of bracken fern (*Pteridium esculentum*), in very good condition (DWER, 2018a).

The applicant has advised that he will retain all large trees within the application area where possible (DWER, 2018a).

According to available databases, three Threatened flora species and 36 priority flora species have been recorded within the local area. Based on the mapped soil and vegetation types within application area, two Threatened flora species and 11 priority flora species could potentially occur within the application area.

Of these, six priority flora species are associated with wet areas, particularly along watercourses and seasonally inundated areas and are associated with scrubland, sedgeland or low woodland.

Sphaerolobium benetectum (Priority 2) is known from a total of nine records from Collie and Denmark areas, at sites generally associated with grey sandy loam over granite soils with open low sedges & dwarf scrub /seasonally wet low scrub (Western Australian Herbarium, 1998-). The nearest record of this species is approximately 3.1 kilometres from the application area.

Leptocarpus crassipes (Priority 3) is known from a total of 13 records from Denmark, Manjimup, Nannup and Plantagenet areas, at sites generally associated with inundated clayey /dark reddish brown sandy soils with open forests of *Eucalyptus marginata* subsp. *marginata* over *Agonis parviceps* (Western Australian Herbarium, 1998-). The nearest record of this species is approximately 6.7 kilometres from the application area.

Tetratheca sp. Kent River (B.G. Hammersley 1791) (Priority 1) is known from a total of 6 records from Denmark and Plantagenet areas, at sites generally associated with granite outcrops with open forest of *Eucalyptus marginata* subsp. *marginata* over low scrub (Western Australian Herbarium, 1998-). The nearest record of this species is approximately 6.8 kilometres from the application area.

Verticordia fimbrilepis subsp. *australis* (Threatened) is known from a total of 14 records from Albany and Denmark areas, at sites generally associated with clay loam over granite with low heath/scrub in association with *Verticordia plumosa* (Western Australian Herbarium, 1998-). The nearest record of this species is approximately 7.1 kilometres from the application area.

Xanthoparmelia sammyi (Priority 1) is a lichen, known from a total of eight records from Cranbrook, Denmark, Narrogin, Ravensthorpe, Trayning and Wandering areas, at sites generally associated with granite soils over *Taxandria* sp. and *Melaleuca* sp. scrub to open forest.

Noting that the applicant has increased the vegetation buffer from the riparian zone of the Kent River, and also noting the distribution of these species, the number of records, and the presence of better quality vegetation within the property and in the local area, the proposed clearing is not likely to have a significant impact on the above Threatened and priority flora species, should any individuals occur within the application area.

As assessed under principle (b), the application area comprises foraging habitat for endangered black cockatoos. Black cockatoo foraging evidence was observed in the vicinity of the application area during site inspection (DWER, 2018a). Noting that the applicant will retain all tall, standing trees outside the development footprint of the proposed dwelling and noting the local area retains 68 per cent native vegetation cover, the proposed clearing is not likely to have a significant impact on breeding and foraging habitat for black cockatoos.

As assessed under principle (d), no priority or threatened ecological communities have been recorded within the local area.

Noting the above, the proposed clearing is not likely to be at variance to this principle.

(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.

Proposed clearing is not likely to be at variance to this principle

According to available databases, ten Threatened fauna species, five priority fauna species and one other specially protected fauna species have been recorded within the local area (DBCA, 2007-).

Noting the habitat requirements of these species, and the type and condition of the vegetation within the application area, the application area may comprise suitable habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black cockatoo (*Calyptorhynchus baudinii*) (collectively known as black cockatoos).

Carnaby's cockatoo is listed as endangered and Baudin's cockatoo and forest red-tailed cockatoo are listed as vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Black cockatoos nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). A site inspection identified a number of trees within the application area that fit the criteria for black cockatoo breeding habitat, having a diameter at breast height (DBH) of more than 50 centimetres (DWER, 2018a). However, noting that the applicant will retain all tall, standing trees outside the development footprint of the proposed dwelling and noting the local area retains 70 per cent native vegetation cover, the proposed clearing is not likely to have a significant impact on breeding and foraging habitat for black cockatoos.

Given the above, the application area is not likely to support habitat for conservation significant fauna species.

The proposed clearing is not likely to be at variance to this principle.

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

Proposed clearing is not likely to be at variance to this principle

According to available databases, three Threatened flora species have been recorded within the local area. The application area does not support habitat for one of the recorded Threatened flora species due to the mapped vegetation type and may comprise of suitable habitat for the other two Threatened flora species:

Kennedia glabrata (Northcliffe Kennedia) (Threatened) is known from a total of 36 records from Manjimup, Albany and Denmark areas, at sites generally associated with sandy soils and granite outcrops with heathland vegetation and jarrah-marri-karri forest (Western Australian Herbarium, 1998-). The nearest record of this species is approximately 6.8 kilometres from the application area.

Verticordia fimbrilepis subsp. *Australis* (Threatened) is known from a total of 14 records from Albany and Denmark areas, at sites generally associated with clay loam over granite with low heath/scrub in association with *Verticordia plumosa* (Western Australian Herbarium, 1998-). The nearest record of this species is approximately 7.1 kilometres from the application area.

Noting the number of records and distribution of both species, the size of the application area and the presence of better quality vegetation within the property and within the local area, the vegetation within the application area is not likely to be necessary for the continued existence of these Threatened flora species.

The proposed clearing is not likely to be at variance to this principle.

(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.

Proposed clearing is not likely to be at variance to this principle

No threatened ecological communities (TEC) are mapped within the application area and are not recorded in the local area.

Noting the vegetation types present, the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of, a TEC.

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

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).

In assessing the risk of further loss and subsequent cumulative effects, consideration has been given to the extent of native vegetation remaining and what is currently managed as conservation estate:

- as indicated in Table 1, the current vegetation extents for the bioregion, the Shire of Denmark and for the mapped vegetation complexes within the bioregion are all above the 30 per cent threshold, with over 60 per cent contained in conservation estate;
- as indicated in Table 1, over 70 per cent of the pre-European extent of all mapped vegetation complexes within the bioregion is contained in conservation estate; and
- the local area retains approximately 68 per cent (22,211.52 hectares) vegetative cover, and the proposed clearing will reduce this by approximately 0.005 per cent.

Given the above, the application area is not likely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

The proposed clearing is not likely to be at variance to this principle.

Table 1: Vegetation representation statistics (Government of Western Australia, 2018)

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent in DBCA Managed Lands	
				(ha)	(%)
IBRA Bioregion					
Warren	833,985.56	658,438.59	79.07	557,850.14	66.89
Local government					
Shire of Denmark	190,533.86	142,246.14	74.66	112,933.56	60.39
Mattiske Vegetation Complex in Bioregion					
Collis 1, COy1	23,057.01	19,028.01	82.53	16,984.30	73.66
Granite Valleys, Vh2	9,968.23	8,394.77	84.22	7,310.82	73.34
Local area					

10 kilometre radius	32,646.02	22,211.52	68.04	-	-
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(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is at variance to this principle

The northern application area is approximately 75 metres from the Kent River, and is outside the waterway's buffer area. The Kent River flows into Irwin Inlet, a regionally significant estuary. A nationally significant wetland system listed in the Directory of Important Wetlands (DIWA), Owingup Swamp System, lies less than 5 kilometres downstream (DWER, 2019). Riparian vegetation was observed within the northern application area during the DWER site inspection (DWER, 2018a; Figure 2).

Noting the reduction in the application area to address impacts to the estuary and wetland system and an appropriate buffer to the Kent River has been maintained. The vegetation within the application is still considered to be growing in an environment associated with a watercourse. Given the reduction in area, the proposed clearing of 0.5 hectares is not likely to be significant.

The proposed clearing is at variance to this principle.

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

Proposed clearing is not likely to be at variance to this principle

Two soils types have been mapped within the application area which are described as:

- **Major Valleys V2 Subsystem (Walpole)**, described as valleys in granitic areas; 20-40 m relief; smooth, moderate slopes; narrow terrace (Mapping unit: 254WhV2), mapped within the northern application area, which includes the area for the proposed dwelling; and as
- **Collis yellow duplex Phase**, described as gravelly yellow duplex soils; Jarrah-Marri forest (Mapping unit: 254WhCOy), mapped within the southern application area, which includes the area for the proposed gravity feeding water tank (DPIRD, 2017).

Noting that the soils associated with the proposed dwelling site has high to extreme risk of eutrophication, moderate to high risk of salinity and high to extreme risk of water erosion (Table 2), the proposed clearing is likely to cause land degradation in the form of streambank erosion. However noting the distance to the Kent River and the maintenance of the riparian zone along the Kent River, the impacts are likely to be minimal and short term.

Table 2: Land degradation risk levels

Risk categories	Major Valleys V2 Subsystem (Walpole)	Collis yellow duplex Phase
Wind erosion	<3% of map unit has a high to extreme wind erosion risk	10-30% of map unit has a high to extreme wind erosion risk
Water erosion	50-70% of map unit has a high to extreme water erosion risk	10-30% of map unit has a high to extreme water erosion risk
Salinity	30-50% of map unit has a moderate to high salinity risk or is presently saline	30-50% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	<3% of map unit has a high subsurface acidification risk or is presently acid	10-30% of map unit has a high subsurface acidification risk or is presently acid
Subsurface compaction	10-30% of the map unit has a high subsurface compaction risk	30-50% of the map unit has a high subsurface compaction risk
Flood risk	<3% of the map unit has a moderate to high flood risk	<3% of the map unit has a moderate to high flood risk
Waterlogging	<3% of map unit has a moderate to very high waterlogging risk	<3% of map unit has a moderate to very high waterlogging risk
Water repellence	<3% of map unit has a high water repellence risk	3-10% of map unit has a high water repellence risk
Phosphorus export risk	50-70% of map unit has a high to extreme phosphorus export risk	10-30% of map unit has a high to extreme phosphorus export risk

The proposed clearing is not likely to be at variance to this principle.

(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.

Proposed clearing may be at variance to this principle

According to available databases, the nearest conservation area is Mount Roe National park, which is approximately 450 metres west of the application area on the western bank of the Kent River, with continuous vegetation across the landscape (Figure 1).

The proposed clearing may indirectly impact on the environmental values of Mount Roe National park through the spread or introduction of weed species or dieback by machinery. Noting the size of the application area, the impacts on the environmental values of these conservation areas are likely to be minimal.

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

A weed and dieback management condition will mitigate impacts to nearby conservation areas.

(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.

Proposed clearing is not likely to be at variance to this principle

The application area is approximately 75 metres from the Kent River, and is therefore outside the waterway's buffer area.

DWER's River Science division advised that the proposed clearing of remnant and riparian vegetation associated with the Kent River has the potential to impact on water quality through increased sediment and nutrient runoff to the Kent River (DWER, 2018d).

Groundwater salinity within the application area is mapped between 500 - 1000 milligrams per litre total dissolved solids which is considered to be marginal. Based on the mapped soil type, the northern application area (site of the proposed dwelling) has moderate to high risk of salinity. Noting the size of the application area, the distance to the Kent River, the presence of better quality remnant vegetation adjacent to the application area and within the local area, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water.

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

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

Proposed clearing is not likely to be at variance to this principle

As discussed in principle (g), the soils within the application area ranges from gravelly yellow duplex soils to granitic terrain (Schoknecht et al., 2004). These soils have a very low risk of flooding. Noting this, the removal of remnant vegetation from the application areas is not likely to contribute to flooding.

The proposed clearing is not likely to be at variance to this principle.

Planning instruments and other relevant matters.

The Shire of Denmark advised in relation to the original application area of 1.56 hectares that as the applicant seeks to undertake clearing of over 5000 square metres of native vegetation it would necessitate development approval being granted under the Shire of Denmark Town Planning Scheme No.3. Clearing over 5000 square metres is defined as 'Tree Felling' under the Scheme (Shire of Denmark, 2018a). A tree felling application was lodged by the applicant on 16 January 2019 (Shire of Denmark, 2018b). The applicant will be advised to obtain Shire approvals prior to clearing.

The proposed future dwelling and associated structure will also require development approval from the Shire of Denmark, which has not been applied for by the applicant to date (Shire of Denmark, 2018b).

The proposed clearing lies within the 1st September 1978 *Country Areas Water Supply Act 1947* (CAWS Act) gazetted Kent River Water Reserve. The reserve is not currently a Public Drinking Water Source Area and no priority source protection is proposed. The Kent River Water Reserve has however been subject to native vegetation clearing controls to prevent salinization of water resources. The proposed clearing is within Zone C of the catchment, a medium salinity risk part of the catchment where DWER Policy and Guidelines for the "Granting of Licences to Clear Indigenous Vegetation" provide for the granting of a licence to clear for essential property management purposes, which includes justified new fence lines and building sites (DWER, 2018c).

DWER's Science and Planning division advised in relation to CAWS Act implications, that an additional pro-rata clearing concession of 25 hectares for a holding as at 15 December 1978 may be considered subject to the following conditions:

- The applicant undertakes a detailed site investigation that would include drilling or documentation of other information that showed no adverse salinisation would occur,
- One tenth of the land holding remains under native vegetation, and
- No clearing is undertaken within riparian areas or riparian area buffer zones (DWER, 2018c).

DWER's CAWS Act advice is that since some of the clearing is also within the riparian area buffer zones of the Kent River that DWER is unable to support those areas covered by the application, but are able to support the clearing for the remaining purposes, that is justified new fence lines and the location of the water tank. This advice is subject to the applicant providing details of the proposed new fence lines including length and location and subsequent approval (DWER, 2018c).

In relation to clearing controls within a CAWS Act area, DWER records show that Licence to Clear LAK189 was granted for 25 hectares in 1981 when the property was part of a larger holding which included the neighbouring Lot 4258. The licence was in accordance with the pro-rata clearing allowance permitted for Zone C. Analysis of 2017 imagery indicates that all of the clearing under LAK189 was performed, however only 6.5 hectares of the clearing occurred on Lot 4257, with the remainder being undertaken on Lot 4258. Since there is no compensation history for Lot 4257, an additional pro-rata clearing concession of 25 hectares for a holding as at 15 December 1978 may be considered subject to conditions as stipulated in the above assessment (DWER, 2018c).

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 4 October 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
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5. GIS Datasets

- Aboriginal Sites of Significance
- Clearing Regulations - Environmentally Sensitive Areas
- Carnaby's cockatoo: breeding, roosting, feeding
- Department of Biodiversity Conservation and Attractions, Tenure
- Geomorphic Wetlands, Swan Coastal Plain
- Groundwater salinity, statewide
- South west forest vegetation complexes
- Hydrology, linear
- IBRA Australia
- Land for Wildlife
- PDWSA, CAWSA, RIWI Act Areas
- Remnant vegetation
- SAC Biodatasets (accessed January 2019)
- Soils, statewide
- South coast significant wetlands
- Town Planning Scheme Zones