



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 8085/1
File Number: DER2018/000909
Duration of Permit: 21 June 2019 to 21 June 2021

PERMIT HOLDER

Diane Marie Fry

LAND ON WHICH CLEARING IS TO BE DONE

Lot 5179 on Deposited Plan 153923, Jardee
Lot 8076 on Deposited Plan 140062, Jardee

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than nine hectares of native vegetation within the area cross hatched yellow on attached Plan 8085/1.

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 *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 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 *weeds* and *dieback* in accordance with condition 2 of the 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.



Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

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

22 May 2019

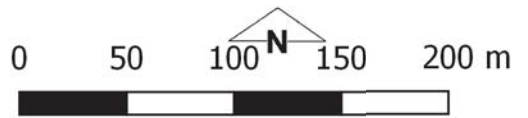
Plan 8085/1



Legend

-  CPS areas approved to clear base layers
-  Cadastre
-  Local Government Authorities

Image



MGA 94
Geocentric Datum of Australia 1994

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Officer delegated under Section 20 of the Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

1.1. Permit application details

Permit application No.: 8085/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Ms Diane Marie Fry
Application received date: 30 May 2018

1.3. Property details

Property: Lot 5179 on Deposited Plan 153923
Lot 8076 on Deposited Plan 140062
Local Government Authority: Manjimup, Shire of
Localities: Jardee

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
9		Mechanical Removal	Horticulture

1.5. Decision on application

Decision on Permit Application: Granted

Decision Date: 22 May 2019

Reasons for Decision: The clearing permit application was received on 30 May 2018 and 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) and is not likely to be at variance to the remaining principles.

Through assessment it was determined that the proposed clearing may result in the spread of weeds and dieback into remnant vegetation adjacent to the application area. A weed and dieback management condition has been placed on the clearing permit to minimise this risk.

In determining to grant a clearing permit, the Delegated Officer determined that the proposed clearing is unlikely to lead to an unacceptable risk to the environment.

2. Site Information

Clearing Description The application is to clear nine hectares of native vegetation within Lot 5179 on Deposited Plan 153923 and Lot 8076 on Deposited Plan 140062, Jardee, for the purpose of horticulture (Figure 1).

Vegetation Description The application area is mapped within the following mapped South West vegetation complexes described as:

- **Yanmah (YN1):** Mixture of tall open forest of *Eucalyptus diversicolor* and tall open forest of *Corymbia calophylla-Eucalyptus patens-Eucalyptus marginata* subsp. *marginata* over *Agonis flexuosa* and *Agonis juniperina* on valleys in perhumid and humid zones; and
- **Crowea (CRy):** Tall open forest of *Corymbia calophylla* with mixture of *Eucalyptus marginata* subsp. *marginata* and *Eucalyptus diversicolor* on uplands in hyperhumid and perhumid zones (Shephard et al., 2001).

A site inspection undertaken by the former Department of Environment Regulation (DER) officers for expired clearing permit CPS 6347/1 which covered the same application area as CPS 8085/1, identified the vegetation within the application area primarily consisting of tall forest of karri, jarrah and marri with bracken fern (*Pteridium aquilinum*) being the most dominant understorey species (DER, 2014). The application area has been historically logged and there were minimal large old growth trees identified on site. There is a small area of riparian vegetation associated with a lower lying area adjacent to the existing dam to the north of the application area, which includes *Melaleuca* sp. and *Kunzea* sp. (DER, 2014).

Vegetation Condition

The site inspection undertaken by DER officers (DER, 2014) identified the vegetation within the application area to range from a degraded to very good (Keighery, 1994) condition, described as:

- Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994); to
- Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994).

The site inspection identified the vegetation within the application area to range from degraded to very good (Keighery, 1994) condition, with the majority of the vegetation in a very good (Keighery, 1994) condition (DER, 2014). The areas in a degraded (Keighery, 1994) condition are located closest to the existing dam.

Soil and landform type

Two soil types have been mapped by the Department of Primary Industries and Regional Development across the application area, described as (Schoknecht et al., 2004):

- **Yanmah Subsystem (Pimelia):** Shallow (5-20 m) minor valleys, usually U-shaped with gentle sideslopes (3-10%) and broad swampy floors. Soils are loamy gravels, sandy gravels and deep sands with non-saline wet soils on the valley floors; and
- **Crowea (Pimelia), yellow duplex Phase:** Gravelly yellow duplex soils; jarrah-marri forest.

Comment

The local area considered in this assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area. The local area retains approximately 59.4 per cent native vegetation cover (19,939.46 hectares).



Figure 1: Application Area cross-hatched in blue

3. Assessment of application against clearing principles

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

Proposed clearing not likely to be at variance to this Principle

As discussed under Section 2, the site inspection identified the vegetation within the application area ranged from degraded to very good (Keighery, 1994) condition, with the majority of the vegetation in a very good (Keighery, 1994) condition (DER, 2014). The areas in a degraded (Keighery, 1994) condition are located closest to the existing dam.

According to available databases, a total of four priority (P) flora taxa (comprising of one P1, two P2 and one P3 flora species) have been recorded within the local area (10 kilometre radius). The closest of these is a P3 species known as '*Pultenaea pinifolia*' mapped approximately 3.5 kilometres north west of the application area. This species is a slender shrub that grows within loam

and clay soils within floodplains and swampy areas (Western Australian Herbarium, 1998-). Noting the habitat requirements for this species, it is not likely that the application area would provide suitable habitat for this species.

The three remaining priority species were recorded in 1988, 1997 and 1999 and mapped approximately 7.7 kilometres (*Deyeuxia inaequalis*, P1), 7.2 kilometres (*Thomasia brachystachys*, P2) and 9.8 kilometres (*Xanthoparmelia xanthomelanoides*, P2) from the application area respectively. Both mapped occurrences of the P1 and the *Thomasia brachystachys* flora species have been recorded within state forest (Donnelly and Big Brook). Donnelly State Forest occupies an area of approximately 32,000 hectares and Big Brook State Forest occupies an area of approximately 3,500 hectares. Given the extensive areas of suitable habitat for these species nearby, the proposed clearing of nine hectares of native vegetation is not likely to impact on their conservation status.

There are five records of *Xanthoparmelia xanthomelanoides* which have been recorded over a range of 1000 kilometres. The closest record to the application area is from 1999 and has been mapped 9.8 kilometres from the application area. Upon review of the records and habitat requirements for this species, it is not likely this species would occur within the application area.

As discussed under Principle (b), the application may support suitable habitat for the conservation significant forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudins cockatoo (*Calyptorhynchus baudinii*) and quokka (*Setonix brachyurus*). Although suitable habitat occurs within the application area, the proposed clearing is not likely to impact upon the conservation status of these species given extensive habitat in a suitable or better condition occurs within the local area in the form of conservation areas.

As assessed under Principle (c), there have been no records of threatened flora species mapped within the local area.

No threatened ecological communities (TEC) or priority ecological communities (PEC) have been recorded in the local area. The vegetation within the application area is not likely to be representative of a PEC or TEC.

The proposed clearing may result in the spread of weeds and dieback into remnant vegetation adjacent to the application area. A weed and dieback management condition will help to minimise this risk.

Given 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

A search of the Naturemap database returned 15 records of conservation significant fauna taxa within a 10 kilometre radius of the application area, which comprised of eight threatened fauna species, two specially protected fauna species and five priority fauna species (Department of Biodiversity, Conservation and Attractions (DBCA), 2007-). Of the species recorded, the application area may provide suitable habitat for five terrestrial/aboreal fauna species listed under the *Biodiversity Conservation Act 2016* (BC Act) within the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* (WC Notice) including:

- forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*) (vulnerable under *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the BC Act);
- Carnaby's cockatoo (*Calyptorhynchus latirostris*) (endangered under EPBC Act and the BC Act);
- Baudin's cockatoo (*Calyptorhynchus baudinii*) (endangered under EPBC Act and the BC Act);
- quokka (*Setonix brachyurus*) (vulnerable under EPBC Act, vulnerable under the BC Act); and
- Western Ringtail Possum (WRP) (*Pseudocheirus occidentalis*) (critically endangered under the EPBC Act and under the BC Act).

The portions of dense understorey vegetation within the application area may also provide suitable habitat for three fauna species listed as Priority flora by DBCA:

- quenda (*Isoodon fusciventer*);
- water-rat (*Hydromys chrysogaster*); and
- western brush wallaby (*Macropus irma*).

Carnaby's cockatoo, Baudin's cockatoo and Forest Red-tailed black cockatoo will be collectively referred to as black cockatoos herein within the report. Black cockatoos forage on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (*Banksia*, *Hakea*, *Grevillea*), Eucalypts, *Corymbia* species and a range of introduced species (Valentine and Stock, 2008). Noting the vegetation type as described under Section 2, the application area contains suitable foraging habitat for all three species of black cockatoo in the form of *Eucalyptus marginata* and *Corymbia calophylla* species. Noting the presence of extensive areas of remnant native vegetation of which the majority falls within DBCA land tenure and is likely to be in a higher quality to the application area, it is considered that the application area is unlikely to comprise significant foraging habitat for black cockatoos.

'Breeding habitat' for black cockatoos is defined as trees of species known to support breeding within the range of the species which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow. For most tree species, suitable DBH is 500 millimetres (Commonwealth of Australia, 2012). The site inspection undertaken by DER officers identified several large mature trees within the application area of which the majority were karri trees (DER, 2014). There were no hollows identified in these trees (DER, 2014). Given this and noting the extensive remnant vegetation surrounding the application area, the application area is not likely to provide suitable breeding habitat for black cockatoos.

In the southern forest of Western Australia, quokkas have a preference for jarrah, marri and karri forest and riparian habitats with a sedge dominated understorey (Department of Environment and Conservation (DEC), 2013). Factors favouring habitat occupancy in the southern forest are burn patchiness, complex vegetation structure and habitat that supports a low density of near-surface fuel (DEC, 2013). Noting the habitat requirements for this species, the application area may provide suitable habitat for the quokka as the application area contains suitable vegetation as well as contains areas of burnt vegetation and an understorey that is recovering. However it is not likely to provide significant habitat noting the extensive native vegetation that occurs within the local area that provides suitable habitat in a similar or better condition.

The WRP has been recorded twice within the local area, with the closest record being 3.1 kilometres from the application area. This species utilises a variety of shelters including dreys (within *Agonis flexuosa*), tree hollows and forks, grass trees (*Xanthorrhoea* spp.), hollow logs, rabbit burrows and forest debris (Shedley and Williams, 2014). Studies have shown that the rate of sighting for the species correlates with the abundance of *Agonis flexuosa* and presence of hollow bearing trees (Shedley and Williams, 2014). The site inspection undertaken in 2014 did not identify any *Agonis flexuosa* within the application area (DER, 2014). Noting the absence of *Agonis flexuosa* and hollow bearing trees, the application area is not likely to provide suitable habitat for this species.

The application area may also provide suitable habitat for the priority fauna species the water-rat, quenda and western brush wallaby given the application area contains portions of dense understorey vegetation. However, noting there are portions of the application area that contain a sparse understorey, and given there are areas of DBCA managed land in close proximity to the application area that contain native vegetation in a similar or better condition, the application area is not likely to provide significant habitat for these species.

Given the above, 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

A search of the DBCA's threatened flora database revealed that no records of threatened flora species have been mapped within the local area (10 kilometre radius). The closest record of threatened flora is a Western Australian Herbarium record from 1921 which has been recorded approximately 12 kilometres south west of the application area. This record was the first of this species collected and housed at the Western Australia Herbarium (Threatened Species Scientific Committee (TSSC, 2018)). The conservation advice for this species notes that the preferable habitat for this species is within greyish-brown clayey sand associated with banks of streams or rivers (TSSC, 2018). Noting the habitat requirements of this species, it is not likely the application area would include suitable habitat for this species.

Given the above, 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

As discussed in Principle (a), no TECs have been recorded in the local area (10 kilometre radius), therefore the vegetation within the application area is not likely to be representative of a TEC listed under the EPBC Act or endorsed by the Western Australian Minister for Environment.

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 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The application area is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion which retains approximately 79 per cent of its pre-European vegetation extent (Government of Western Australia, 2018).

The vegetation within the application area is mapped as South West vegetation complexes Yanmah (YN1) and Crowea (CRY) which retain approximately 82 and 72.4 per cent of their pre-European vegetation extents respectively within the Warren IBRA bioregion (Government of Western Australia, 2018).

The local area is highly vegetated and retains approximately 59.4 per cent (19,939.46 hectares) of its pre-European vegetation extent.

Noting the remaining extents of native vegetation within the local area, the IBRA bioregion and the mapped vegetation complexes are all above the minimum 30 per cent representation threshold, the application area is not considered to be a significant remnant in an extensively cleared area.

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

Table 1: Vegetation extents

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent in all DBCA managed lands (ha)	Extent remaining in all DBCA managed lands (proportion of Pre-European extent) (%)
IBRA Bioregion					
Warren	833,985.6	659,438.6	79	557,850.2	66.9
South West (Mattiske) Vegetation Complex					
Yanmah (YN1)	19,267	18,544.2	82	18,126	77.2
Crowea (CRy)	33,764.6	24,442	72.4	22,413.2	66.4

(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

According to available databases, the application area is adjacent to an existing earth dam. A mapped minor perennial watercourse known as 'Scabby Gully' which is a tributary of the Lefroy Brook is located approximately 100 metres east of the most Western extent of the application area.

The site inspection undertaken by DER officers observed riparian vegetation in the form of *Melaleuca* and *Kunzea* species located within the northern tip of the application area where there is a wetter area associated with a slightly lower lying area subject to minor water inundation adjacent to the existing dam (DER, 2014).

Given the above, the proposed clearing is growing in association with an environment associated with a wetland or watercourse, therefore 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

As described under Section 2 'Site information', the application area is situated within two soil map units which include the Yanmah Subsystem (Pimelia) and Crowea (Pimelia), yellow duplex Phase. The Yanmah Subsystem (Pimelia) is the most prevalent soil type within the application area, with approximately 98.3 per cent of the application area mapped within this soil unit (Schoknecht et al., 2004). A very small portion of the south western tip of the application area (approximately 1.7 per cent) occurs within the Crowea (Pimelia), yellow duplex Phase soil unit. The Yanmah Subsystem comprises of loamy gravels and sandy gravels which is the dominant soil type (Deputy Commissioner of Soil and Land Conservation (DCSLC), 2018).

The findings of the Land Degradation Report concluded that the risk of land degradation in the form of water erosion, eutrophication, waterlogging, flooding, wind erosion and salinity as a result of the proposed clearing is low (DCSLC, 2018). The findings of this land degradation assessment remains unchanged and is consistent with the advice received for expired clearing permit CPS 6347/1, that the risk of land degradation as a result of the proposed clearing is low (CSLC, 2014).

The DCSLC advises that the application area is not likely to cause appreciable land degradation, therefore the proposed clearing is not likely to be at variance to this Principle (DCSLC, 2018).

(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 is not likely to be at variance to this Principle

The application area is surrounded by the Donnelly State Forest, which at its closest point occurs 640 metres south west of the application area. The Donnelly State Forest is extensive and occupies an area of approximately 32,000 hectares.

Noting the application area is separated from the State Forest by existing cleared paddocks, it is not likely the proposed clearing will impact upon the environmental values of this conservation area or any nearby conservation areas given the lack of connectivity to these reserves.

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

(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

As discussed under Principle (f), the northern tip of the application area is located in a low lying wet area subject to minor water inundation.

As discussed under Principle (g), the application area consists of loamy gravels and sandy gravelly soils. The proposed clearing may cause increased sedimentation into the adjacent existing dam, however impacts are likely to be short term and minimal

given the small amount of clearing proposed alongside the dam. The DCSLC advised that the risk of land degradation in the form of water erosion is considered to be low (DCSLC, 2018).

Groundwater salinity over the application area has been mapped between less than 500 and 1000 milligrams per litre per total dissolved solids. Given this low salinity level, it is considered that the proposed clearing will not lead to a perceptible rise in the water table and thus an increase in groundwater salinity levels.

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

The proposed dam expansion will result in the flooding of some of the application area, however this will be maintained within the confines of the proposed enlarged dam, and will not encroach into surrounding areas of native vegetation south. The proposed clearing is not likely to cause or exacerbate flooding on site.

A Land Degradation Report undertaken by Department of Primary Industries and Regional Development identified that the proposed clearing is not likely to contribute to flooding (DCSLC, 2018).

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

Planning instruments and other relevant matters.

The application area falls within a 'Priority not assigned' Public Drinking Water Source Area, whereby protection of water quality against degradation is a priority via managing land use risks (DWER, 2018a). The South West water licencing section advised that where practical/appropriate, it is recommended that the applicant carries out best practice measures consistent with the Department's 'Water Quality Protection Note 34 – Orchards Near Sensitive Water Resources' in order to minimise the risks of erosion and nutrient input into the waterways. These measures include:

- Having drainage channels properly located and designed to minimise erosion and nutrient transport;
- Establishing perennial grasses between planted rows to control erosion and attenuate nutrients;
- Contour plantings in steep areas to minimise erosion;
- The use of organic fertilisers / soil amendments like manure, compost and mulch is encouraged;
- The use of fertilisers, pesticides and fertilizers follow best management practices; and
- Clearing to take place during the dry period of the year where the risk of erosion is lowest (DWER, 2018a).

The DWER's South West water licencing Region advised that the applicant currently holds a surface water licence (SWB1423) under the *Rights in Water and Irrigation 1914* (RIWI Act). The applicant submitted an application under s5C of the RIWI Act to amend this licence (SWL181915(1)) to increase their water entitlement from the Upper Lefroy for horticulture, aquaculture and livestock purposes on the property (DWER, 2018b). On 23 November 2018, DWER's South West water licencing Region provided formal correspondence to the applicant advising that the department proposes to refuse the application given abstraction from the Upper Lefroy variable take resource within the Upper Lefroy River and Tributaries area has reached the allocation limit (DWER, 2018b). The application for an amendment to the surface water licence (SWL181915(1)) was refused on this basis on 4 February 2019 (DWER, 2018c).

The application area is within the *Country Areas Water Supply Act 1947* (CAWS Act) gazetted Warren River Water Reserve. The catchment has been subject to CAWS Act native vegetation clearing controls since December 1978 to prevent salinization of water resources (DoW, 2014). The former Department of Water (DoW) advised that a CAWS Act Licence to Clear LBR825 was issued to the proponent in 1991 for the silvicultural thinning of 20 hectares of native vegetation within Lots 8076 and 5179. There is no compensation history on Lots 8076 or 5179 (DoW, 2014).

The proposed clearing is within Zone D of the catchment, which is a low salinity risk area where policy provides for the grant of a license to clear subject to the statutory requirement that 10 per cent of the land in question remains uncleared (DoW, 2014). Analysis of aerial imagery of the land owner's holdings indicates that there will be greater than 10 per cent native vegetation remaining on both properties post-clearing (DoW, 2014). The former DoW advised that they have no objection to the proposed clearing (DoW, 2014).

The Shire of Manjimup (the Shire) advised that the land under application is zoned by the Local Planning Scheme No. 4 as 'Priority Agriculture' and planning approval is not required in this zone (Shire of Manjimup, 2018).

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

The clearing permit application was advertised on the DWER website on 14 September 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.
Commissioner of Soil and Land Conservation (CSLC) (2014) Land Degradation Assessment Report for Clearing Permit Application CPS 6347/1. Site inspection undertaken 10/12/2014. Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia (DER Ref: A848305).
Department of Water (DoW) (2014) Country Areas Water Supply Advice for CPS 6347/1 (DER Ref: A842748).

Deputy Commissioner of Soil and Land Conservation (DCSLC) (2018) Land Degradation Assessment Report for Clearing Permit Application CPS 8085/1. Site inspection undertaken 14/09/2018. Deputy Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia (DER Ref: A1727746).

Department of Environment and Conservation (DEC) (2013) Quokka (*Setonix brachyurus*) Recovery Plan. Wildlife Management Program No. 56. Department of Environment and Conservation, Perth, Western Australia.

Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife, Perth, Western Australia. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed October 2018.

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Department of Water and Environmental Regulation (DWER) (2018a) Water licencing advice received from DWER South West Region for clearing permit application CPS 8085/1, received 31 January 2018, Department of Environment and Regulation, Western Australia (DWER Ref: A1723083).

Department of Water and Environmental Regulation (DWER) (2018b) Advice received from DWER South West water licencing Region in relation to RIWI surface water licence amendment, received 28 November 2018, Department of Environment and Regulation, Western Australia (DWER Ref: A1744067).

Department of Water and Environmental Regulation (DWER) (2018c) Advice received from DWER South West water licencing Region in relation to RIWI surface water licence amendment, received 12 March 2019, Department of Environment and Regulation, Western Australia (DWER Ref: A1785724).

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Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001). Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Manjimup (2018) Direct Interest Advice received for Clearing Permit Application CPS 8085/1 (DWER Ref A1721615).

Threatened Species Scientific Committee (TSSC, 2018) *Commersonia apella* (many-flowered commersonia) Conservation Advice. Department of the Environment and Energy. Canberra.

Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed May 2019).

GIS Database:

- Aerial imagery
- Remnant vegetation
- SAC bio datasets (accessed May 2019)
- Pre-European Vegetation
- Hydrography, linear
- Soils, statewide
- Department of Biodiversity, Conservation and Attractions, Tenure
- Aboriginal Sites of Significance