



## 1. Application details

### 1.1. Permit application details

Permit application No.: 6817/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: R & R Jordan Pty Ltd ATR R & R Jordan Superannuation Fund

### 1.3. Property details

Property: LOT 51 ON PLAN 10545, BARRAGUP  
Colloquial name:  
Local Government Authority: MURRAY, SHIRE OF  
DER Region: Greater Swan  
DPaW District: SWAN COASTAL  
LCDC:  
Localities: BARRAGUP

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		Mechanical Removal	Grazing & pasture

### 1.5. Decision on application

Decision on Permit Application: Refused  
Decision Date: 12 May 2016  
Reasons for Decision: The applicant has applied to clear one hectare of native vegetation.

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing may be at variance to principles (e), (f) and (h).

An assessment has determined that the application area may impact native vegetation that is significant as a remnant, growing in or in association with a watercourse, and a linkage between the conservation reserve and conservation category wetland. The application is inconsistent with the zoning of the land, and is located within an area subject to a moratorium on land clearing.

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation association 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree ( <i>Melaleuca</i> spp.) (Shepherd et al, 2001)	The application is to clear one hectare of native vegetation within Lot 51 on Plan 10545, Barragup, Shire of Murray, for the purpose of grazing and pasture.	Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).	The vegetation within the applied area consists of open woodland of <i>Banksia</i> , <i>Kunzea</i> and <i>Melaleuca</i> species and is positioned in the lower slopes of the landscape (CSLC, 2016).
Hedde vegetation complex Bassendean Complex-Central AndSouth: vegetation that ranges from woodland of <i>Eucalyptus marginata</i> (Jarrah) - <i>Allocasuarina fraseriana</i> (Sheoak) - <i>Banksia</i> species to low woodland of <i>Melaleuca</i> species, and sedgelands on the moister sites. This area includes the transition of <i>Eucalyptus marginata</i> (Jarrah) to <i>Eucalyptus tottiana</i> (Pricklybark) in the vicinity of Perth (Hedde et al, 1980).		To Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The condition and structure of the vegetation under application was obtained via a site inspection undertaken by the Department of Agriculture and Food Western Australia on 22 January 2016 (CSLC, 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 is not likely to be at variance to this Principle**

The application is to clear one hectare of native vegetation within Lot 51 on Plan 10545, Barragup, Shire of Murray, for the purpose of grazing and pasture. The vegetation is in a degraded to good (Keighery, 1994) condition, and may act as a corridor to facilitate the movement of species between a nearby conservation reserve and a conservation category wetland.

Five rare flora species have been recorded within the local area (defined by a 10 kilometre radius around the application area), two of which have been recorded from sites containing the same soil and vegetation types as those found within the application area. Noting the specific habitat requirements of these species, it is unlikely that they occur within the application area.

A total of 32 priority flora species have been recorded within the local area. *Dillwynia dillwynioides* (priority 3) has been recorded approximately 520 metres from the proposed clearing area. *Jacksonia sericea* (priority 4) has been recorded approximately one kilometre from the proposed clearing area. Several other priority 3 and 4 flora have been recorded within the same soil and vegetation types as those contained within the application area. Priority 3 species are those that are known from several locations and which do not appear to be under imminent threat, and priority 4 species are those that have been adequately surveyed or for which significant knowledge is available and which are considered not currently threatened (Jones, 2015). Considering this and noting the relatively small extent of the application area, it is unlikely that the proposed clearing will impact on the overall conservation status of any priority 3 or 4 flora.

Four threatened ecological communities (TECs) have been recorded within the local area. The vegetation within the application area does not align with these TECs, and is therefore is not likely to be a representation of a TEC.

Two priority ecological communities (PECs) have been mapped within the local area. These are priority 3 and consist of low lying *Banksia attenuata* woodlands or shrublands and *Banksia ilicifolia* woodlands. Images of the application area supplied by the Commission of Soil and Land Conservation (CSLC, 2016) indicate vegetation within the application area to consist of predominately *Kunzea* and *Melaleuca* species with *Banksia grandis* trees sporadically throughout.

A total of 29 fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area. Noting the specific habitat requirements of the majority of these species, it is unlikely that they occur within the application area. In respect to black cockatoo species, it is noted that the vegetation under application includes *Banksia* species and large trees which may provide foraging and breeding habitat, however noting the extent of the proposed clearing and the applicant's commitment to retaining the large trees, the impacts of the proposed clearing on black cockatoos are unlikely to be significant.

Given the above the native vegetation under application is not likely to comprise a high level of biological diversity, and therefore the proposed clearing is not likely to be at variance to this principle.

##### Methodology

References:  
CSLC (2016)  
Jones (2015)  
Keighery (1994)

GIS Databases:  
- SAC Bio datasets accessed January 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 not likely to be at variance to this Principle**

The Commissioner of Soil and Land Conservation advised that the vegetation within the application area comprises *Banksia*, *Kunzea* and *Melaleuca* species in degraded to good (Keighery, 1994) condition (CSLC, 2016). Digital imagery indicates that the local area (defined by a 10 kilometre radius around the application area) retains approximately 25 per cent vegetation cover.

The application area may act as a corridor and facilitate the movement of fauna between areas of remnant vegetation within the local area. The impact from the proposed clearing may hinder fauna movement, increasing the distance fauna have to negotiate between areas of vegetation, however noting the condition of the vegetation within the application area and extent of the proposed clearing the impacts are unlikely to be significant.

A total of 29 fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area. These include Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*), forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), chuditch (*Dasyurus geoffroi*), numbat (*Myrmecobius fasciatus*) and southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) (Parks and Wildlife 2007-).

In respect to black cockatoos, the application area includes *Banksia* spp. which may be utilised as foraging habitat, however noting the extent of the proposed clearing the vegetation is not likely to comprise significant foraging habitat for black cockatoos. The application area may contain trees of a suitable size to provide nesting habitat, however noting that the applicant has committed to retaining large trees it is unlikely that the proposed clearing will impact on nesting habitat for black cockatoos.

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

**Methodology** References:  
CSLC (2016)  
Keighery (1994)  
Parks and Wildlife (2007- )

**(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**

Five rare flora species have been recorded within the local area (defined by a 10 kilometre radius around the application area), two of which have been recorded from sites containing the same soil and vegetation types as those found within the application area. The remaining three species have been recorded from sites containing different soil and vegetation types to those found within the application area, and it is unlikely that the proposed clearing area would impact them.

The closest known records of rare flora occurring within the same soil and vegetation types as those found within the area under application are located approximately 1.8 and 2.8 kilometres from the application area. Both species are associated with low lying areas alongside winter-wet swamps and/or peaty/sandy-clay swamps that contain water in summer (Brown et al, 1998).

Advice from the Commissioner of Soil and Land Conservation states that the application area contains well to moderately well-drained sandy soil, and that no obvious waterways or water collection areas were observed within the application area (CSLC, 2016). Noting the specific habitat requirements of these species, it is unlikely that they occur within the application area.

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

**Methodology** References:  
Brown et al (1998)  
CSLC (2016)  
  
GIS Database  
- SAC Bio datasets accessed January 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 is not likely to be at variance to this Principle**

Four threatened ecological communities (TECs) have been recorded within the local area (defined by a 10 kilometre radius around the application area).

The vegetation under application comprises open woodland of *Banksia*, *Kunzea* and *Melaleuca* species and is positioned in the lower slopes of the landscape (CSLC, 2016). The vegetation within the application area does not align with these TECs, and therefore is not likely to be a representation of a TEC.

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

**Methodology** References:  
CSLC (2016)  
  
GIS Database  
- SAC Bio datasets accessed January 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 may be at variance to this Principle**

The application is to clear one hectare of native vegetation. The Commissioner of Soil and Land Conservation advised that the vegetation within the application area is in degraded to good (Keighery, 1994) condition (CSLC, 2016). Digital imagery indicates that the local area (defined by a 10 kilometre radius around the application area) retains approximately 25 per cent vegetation cover.

The vegetation under application is mapped as Beard vegetation association 1000 of which there is 25 per cent of its pre-European vegetation remaining within the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion (Government of Western Australia, 2014). The vegetation under application is also representative of Hedde vegetation complex Bassendean Complex-Central and South of which there is 26 per cent of its pre-European extent remaining (Parks and Wildlife, 2015).

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 mapped Beard vegetation association and the Hedde vegetation complex are below the threshold level of 30 per cent recommended in the National Objectives Targets for Biodiversity Conservation.

Noting that the application area is located within a constrained area (being the Peel Region), includes vegetation in good (Keighery, 1994) condition and comprises under-represented vegetation communities, the vegetation under application may be significant as a remnant.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
<b>IBRA Bioregion*</b>				
Swan Coastal Plain	1,501,221	580,697	39	37
<b>Shire*</b>				
Shire of Murray	170,583	89,032	52	83
<b>Beard Vegetation Association in Bioregion*</b>				
1000	94,175	23,872	25	18
<b>Hedde Vegetation Complex **</b>				
Bassendean Complex-Central And\South	87,476	22,869	26	5

**Methodology** References:  
Commonwealth of Australia (2001)  
CSLC (2016)  
Government of Western Australia (2014)  
Keighery (1994)  
Parks and Wildlife (2015)

GIS Databases:  
- Pre-European

**(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 may be at variance to this Principle**  
A resource enhancement wetland is mapped approximately 20 metres east of the area under application, covering an area of approximately 8.8 hectares. Resource enhancement wetlands are wetlands which may have been partially modified but still support substantial ecological attributes and functions (Water and Rivers Commission, 2001). These wetlands have the potential to be restored to conservation category wetlands and rehabilitation is encouraged (EPA, 2008b).

Several other wetlands, including conservation category wetlands and multiple use wetlands, have also been mapped within 10 kilometres of the area under application. Conservation category wetlands are mapped within close proximity to the application area, located approximately 270, 400 and 900 metres away.

The application area occupies the lower slopes position of the landscape and the presence of *Kunzea* and *Melaleuca* species (CSLC, 2016) within the application area suggest that the vegetation under application may be growing in association with the resource enhancement wetland.

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

**Methodology** References:  
CSLC (2016)  
EPA (2008b)  
Water and Rivers Commission (2001)

- GIS Databases:  
- Geomorphic Wetlands, Swan Coastal Plain  
- Hydrology, Statewide

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

**Comments**      **Proposed clearing is not likely to be at variance to this Principle**  
Advice from the Commissioner of Soil and Land Conservation (CSLC) states that the soil type within the application area is mapped as Bassendean B2 (map unit 212Bs\_2) (CSLC, 2016), and that the landform and soils within the application area are dominated by flat to very undulating sandplain with well to moderately well-drained deep bleached grey sands with a pale yellow B horizon or weak iron-organic hard pan at one to two metres (CSLC, 2016).

The CSLC advised that the likelihood of land degradation occurring as a result of the proposed clearing is low, and that the risk of salinity, wind erosion, eutrophication, water erosion, flooding and waterlogging causing land degradation as a result of removing the native vegetation is low.

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

**Methodology**      References:  
CSLC (2016)

**(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 may be at variance to this Principle**  
The nearest conservation area is a Department of Parks and Wildlife-managed conservation reserve located approximately 860 metres north-west of the application area. A conservation category wetland is located approximately 270 metres south-east of the application area.

The application area may act as a corridor to facilitate the movement of species between the conservation reserve and conservation category wetland. Whilst the proposed clearing will impact on the values of this linkage it will not completely sever the linkage as approximately 0.7 hectares of vegetation will remain on the property.

The proposed clearing may be at variance to this principle.

**Methodology**      GIS Database  
- 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**  
Advice from the Commissioner of Soil and Land Conservation (CSLC) states that the application area contains well to moderately well-drained sandy soil, and that the risk of salinity, wind erosion, eutrophication and water erosion causing land degradation (which may affect the quality of surface water runoff) is low (CSLC, 2016).

The CSLC advised that no obvious waterways or water collection areas were observed within the application area, however noted that the application area is located within one kilometre south of and at a slightly higher elevation than Black Lake (CSLC, 2016).

A resource enhancement wetland is mapped approximately 20 metres east of the area under application. The proposed clearing may cause some short term localised surface water sedimentation that may impact upon the nearby resource enhancement wetland, however these effects are likely to be negligible.

Groundwater salinity within the application area ranges between 500-1000 total dissolved solids per milligram per litre. The CSLC advised that there were no signs of salinity on site or in the general area and no significant changes to groundwater salinity is expected from the clearing (CSLC, 2016).

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

**Methodology**      References:  
CSLC (2016)

GIS Database:  
- Geomorphic Wetlands, Swan Coastal Plain  
- Groundwater Salinity, Statewide  
- Hydrology, 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**

Advice from the Commissioner of Soil and Land Conservation (CSLC) states that the application area contains well to moderately well-drained sandy soil (CSLC, 2016).

The CSLC advised that the risk of flooding causing land degradation (which may affect the volume of surface water runoff) is low (CSLC, 2016).

Considering the sandy soils within the application area, the clearing as proposed is not likely to cause or exacerbate the incidence or intensity of flooding and therefore is not likely to be at variance to this principle.

**Methodology** References:

CSLC (2016)

GIS Database:

- Geomorphic Wetlands, Swan Coastal Plain
- Groundwater Salinity, Statewide

**Planning instruments and other relevant matters.**

**Comments** The applicant is in the process of purchasing the property under application.

On 7 December 2015 the application was advertised in *The West Australian* newspaper for a period of 21 days. No public submissions were received.

The application area is zoned Special Rural 2 under the Shire of Murray's Town Planning Scheme No. 4. The Shire of Murray advised that within this zoning clearing would only be expected for a building and associated fire protection, and that its Local Biodiversity Strategy recommends limited clearing of any upland Bassendean complex vegetation within the Shire (Shire of Murray, 2015). The Shire of Murray advised that taking this and the purpose of the proposed clearing into consideration, it does not support this application.

The Commissioner of Soil and Land Conservation (CSLC) advised that the application area is approximately one kilometre south of Black Lake which empties into the Serpentine River, which flows into the Peel Inlet. The CSLC noted that the Peel Inlet has been under threat for many years from the impact of nutrients exported from agricultural and urban land, and advised that the end land use may contribute to excess nutrients entering the Peel Inlet. The CSLC advised that the application area is located within the gazetted Peel-Harvey Catchment that is subject of a moratorium on land clearing under a Ministerial condition arising from the Environmental Review and Management Plan (ERMP). (CSLC, 2016).

In January 1989 a general moratorium on clearing and drainage proposed in the Stage 2 Environmental Review and Management Plan (commitment 3.6) was set as a Ministerial condition (Ministerial Approval Statement 055). These controls are to continue until the Minister for Environment is satisfied that these activities are to be environmentally acceptable (WAPC, 2003).

Achievement and maintenance of environmental quality objectives are managed primarily through the planning process. To this end, the *Environmental Protection (Peel Inlet-Harvey Estuary) Policy 1992* (EPP) and the Statement of Planning Policy No. 2.1 *The Peel-Harvey Coastal Plain Catchment* (SPP 2.1) were introduced in 1992 to target phosphorus reductions in the Catchment (EPA, 2008).

The purpose of the EPP is to set out the environmental quality objectives for the Peel Inlet and Harvey Estuary and outline the means by which these objectives are to be achieved and maintained. The EPP environmental quality objectives relate to limiting the median load (mass) of total phosphorous flowing into the Estuary so that excessive growth of algae can be prevented.

The SPP 2.1 contains specific policy provisions that relate to different land uses, including a requirement that SPP 2.1 shall be implemented through the local planning schemes operating within the Peel-Harvey Coastal Plain Catchment. Clause 6.2 of SPP 2.1 specifies that for rural residential lots over 4000 square metres, existing vegetation should be retained except where there are defined building envelopes, approved utility requirements and firebreaks, and the keeping of horses, sheep, goats and other grazing animals shall be subject to the prior approval of the Council (WAPC, 2003).

Subsequently, in 2008 the Environmental Protection Authority (EPA) published the *Water Quality Improvement Plan for the Rivers and Estuary of the Peel-Harvey System – Phosphorus Management* to address catchment management measures and control actions relating only to phosphorus loads to the waterways (EPA, 2008).

Under section 51P(2) of the *Environmental Protection Act 1986* the CEO shall refuse to grant a clearing permit if the CEO considers that the associated effect on the environment would be inconsistent with any approved policy. This requirement should be considered in relation to the EPP and the EPA's Water Quality Improvement Plan.

**Methodology** References:

#### 4. References

- Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- Commissioner of Soil and Land Conservation (2016) Land Degradation Advice and Assessment Report for clearing permit application CPS 6817/1, received 4 February 2016. Department of Agriculture and Food Western Australia (DER Ref:A1045062).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra. Department of Parks and Wildlife (2007- ) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed January 2016
- Department of Parks and Wildlife (2015) 2015 South West Forest and Swan Coastal Plain Vegetation Complex Statistics: a report prepared for the Department of Environment Regulation. Current as of March 2015. Department of Parks and Wildlife, Perth, Western Australia.
- Environmental Protection Authority (2008a) Environmental Guidance for Planning and Development. Guidance Statement No. 33, dated May 2008. Environmental Protection Authority, Perth, Western Australia.
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- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.
- Hedde, E.M., Loneragan, O.W., and Havel, J.J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Jones, A. (2015) Threatened and Priority Flora List, 11 November 2015. Department of Parks and Wildlife: Kensington, WA.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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 Murray (2015) Advice received in relation to Clearing Permit Application CPS 6817/1 - R&R Jordan Superannuation Fund (DER Ref:A1021697).
- Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.
- Western Australian Planning Commission (2003) Statement of Planning Policy No. 2.1 The Peel Harvey Coastal Plain Catchment. Statement of Planning Policy No. 2.1 (first gazetted 21 February 1992 and amended 19 September 2003). Government of Western Australia.

