



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: CPS 7252/1

File Number: 2016/001739-1

Duration of Permit: From 28 April 2018 to 28 April 2020

### PERMIT HOLDER

Wallace Frederick King

Janice Irene King

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 22 on Deposited Plan 54348, Arrowsmith

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 291 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7252/1.

### 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. Wind erosion management

The Permit Holder must ensure that the planting of crop species occurs within three months of the authorised clearing being undertaken.

#### 4. 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;
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this Permit; and
- (f) actions taken to minimise the risk of wind erosion in accordance with condition 3 of this Permit.

#### 5. Reporting

The Permit Holder must provide to the CEO the records required under condition 4 of this Permit, when requested by the CEO.

#### DEFINITIONS

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

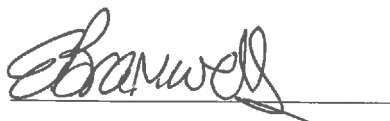
**dieback** means the effect of *Phytophthora* species on native vegetation;

**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.



Emma Bramwell  
A/MANAGER  
CLEARING REGULATION

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

29 March 2018

# Plan 7252/1



## Legend

- Areas approved to clear
- roads\_201501131816
- lga\_201501131742 cadastre
- Cadastre
- WANow\_Imagery



MGA 94  
Geocentric Datum of Australia 1994

*E Bramwell* ..... Date *29/03/18*  
**E BRAMWELL**

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



**GOVERNMENT OF  
WESTERN AUSTRALIA**



## 1. Application details

### 1.1. Permit application details

Permit application No.: 7252/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Mrs Janice Irene King  
Mr Wallace Frederick King

### 1.3. Property details

Property: LOT 22 ON PLAN 54348, ARROWSMITH  
Local Government Authority: IRWIN, SHIRE OF  
DWER Region: Midwest  
DBCAs District: MOORA  
Localities: ARROWSMITH

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 29 March 2018  
Reasons for Decision: The clearing permit application was received on 29 August 2016 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 clearing principle (g), may be at variance with clearing principle (h) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer determined that the proposed clearing is likely to cause land degradation in the form of wind erosion and may increase the risk of weeds being introduced or spread into adjacent vegetation, including within conservation areas. The implementation of wind erosion and weed management measures will assist in minimising these risks.

## Site Information

**Clearing Description:** The revised application is to clear up to 291 hectares of native vegetation within Lot 22 on Deposited Plan 54348, Arrowsmith, for the purpose of grazing and pasture. The application area is comprised of two portions, as indicated in Figure 1.

**Vegetation Description:** The application area is mapped as Beard vegetation association 433, described as mosaic: Shrublands; *Acacia rostellifera* (summer-scented wattle) and *Melaleuca cardiophylla* (tangling Melaleuca) thicket / Sparse low woodland; *Eucalyptus erythrocorys* (illyarrie) (Shepherd et al., 2001).

Officers of the former Department of Environment Regulation (DER) conducted site inspection of the original application area on 13 October 2016 (DER site inspection). The DER site inspection found that the application area comprises mainly of summer scented wattle and melaleuca species with minimal native understorey, with small scattered pockets of mallee species over minimal native understorey (DER, 2016).

**Vegetation Condition:** Degraded; Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994).  
To  
Completely Degraded; The structure of the vegetation is no longer intact and the area is completely or almost completely without native vegetation (Keighery, 1994).

The majority of the vegetation within the application area is in a degraded (Keighery 1994) condition. The DER site inspection found that the application area has been subject to previous farming activities such as cropping and grazing with a large presence of weeds, and that there was very little evidence of a native midstorey or groundcover being present (DER, 2016).

**Soil and Landform Type:** The application area is mapped within two land subsystems (Schoknecht et al., 2004):

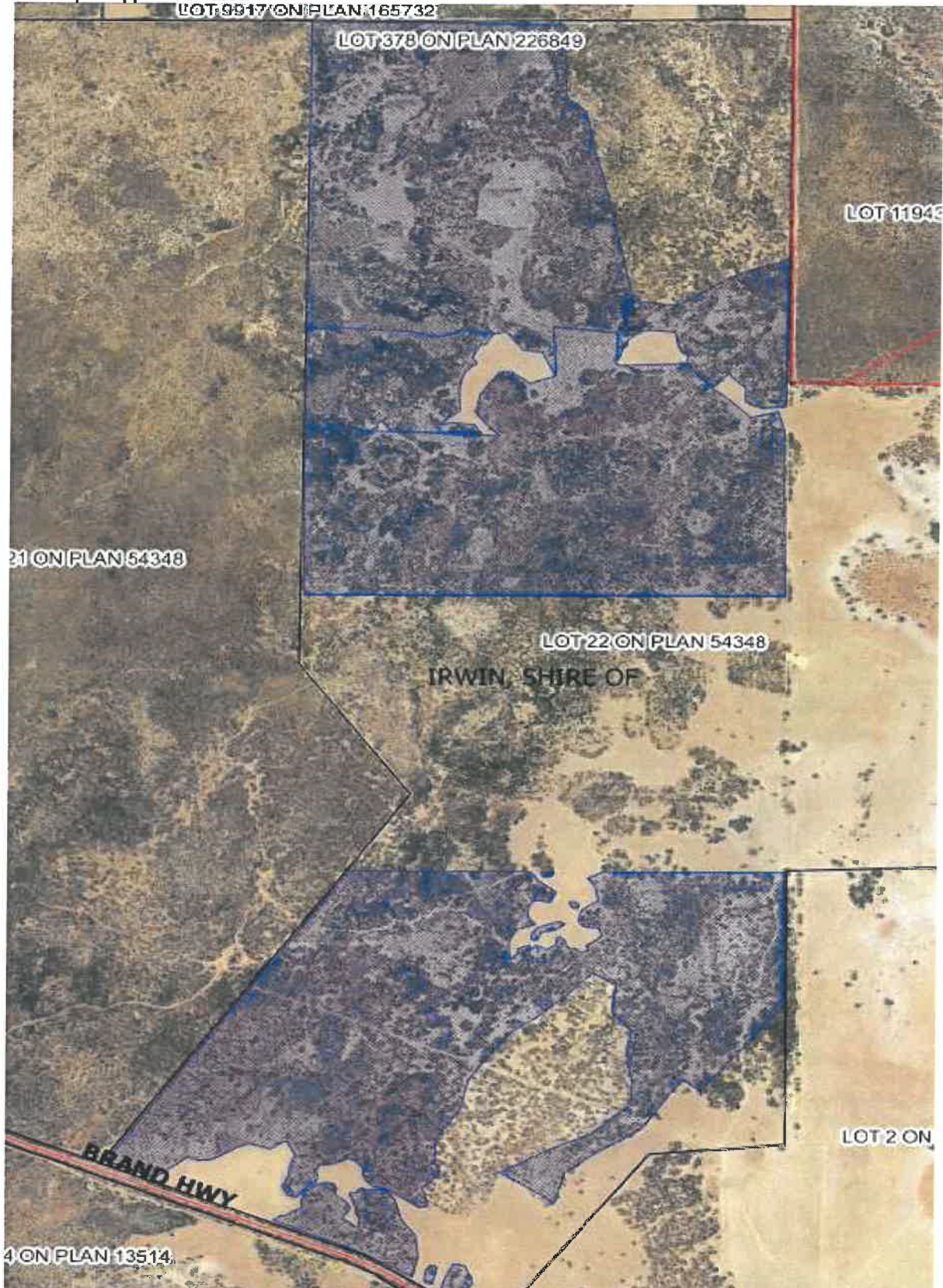
- Tamala South 5 Subsystem ( Map Unit 221Ta\_5) is described as low hills with relict dunes and some limestone outcrop, calcareous shallow and deep sands (mapped over approximately 40 per cent of the application area); and

- Tamala South 4 Subsystem ( Map Unit 221Ta\_4) is described as low hills with relict dunes and some limestone outcrop, yellow sand with limestone outcrops and yellow deep sand (mapped over approximately 60 per cent of the application area).

**Comment:**

The local area referred to in this assessment is defined as the area within a 20 kilometre radius of the application area. Aerial imagery indicates that the local area retains approximately 75 per cent native vegetation cover.

**Figure 1: Map of application area**



**Figure 2: Photographs of vegetation within the application area**



Photo 1: Is a representative of the vegetation within the application area (as revised).



Photo 2: Is a representative of the vegetation within the application area (as revised).



Photo 3: Is a representative of the vegetation within the application area (as revised).



Photo 4: Is a representative of the vegetation within the application area (as revised).

## **2. 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 revised application is to clear up to 291 hectares of native vegetation within two separate areas referred to the south and north portion. As indicated within the above photos 1, the application area shows evidence of past agricultural activities.

As discussed in Section 2, the vegetation within the application area comprises shrublands, the majority of which is in a degraded (Keighery, 1994) condition.

According to the available datasets, three threatened fauna, five fauna protected under international agreement and five priority fauna have been recorded within the local area (DBCA, 2007-). The application area is unlikely to provide significant habitat for these species. Fauna habitat and conservation significant fauna species are discussed under Principle (b).

According to the available datasets, 51 priority flora species have been recorded in the local area. Of these, one Priority 3 flora species (being species that are known from several locations and do not appear to be under imminent threat (Jones, 2015)) and one Priority 4 species (being species are considered to have been adequately surveyed and are considered not currently threatened or in need of special protection (Jones, 2015)) have been recorded from similar soil and vegetation types as mapped within the application area, as discussed below. Rare flora are discussed under Principle (c).

- *Eucalyptus zopherophloia* (Priority 4) is known from 51 records at sites generally supporting grey/white sand with limestone rubble, coastal areas (FloraBase website, March, 2018). The nearest record of this species occurs approximately 100 east of the south portion of the application area. The application area may comprise suitable habitat for this species. Noting that this species is widespread and locally common, should the species occur within the application area, the proposed clearing it is unlikely to affect the conservation status of the species.
- *Hopkinsia anoetocolea* (Priority 3) is known from 45 records at sites generally supporting white of grey sand, often saline, within winter wet-depressions, floodplains and salt lakes (FloraBase website, March, 2018). The nearest record of this species occurs approximately 1.7 kilometres west of the south portion of the application area. Noting the specific habitat preferences of this species, it is unlikely to occur within the application area.

Given the above, the application area is unlikely to comprise a high level of biological diversity. 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 indigenous to Western Australia.**

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

According to the available datasets, three threatened fauna, five fauna protected under international agreement and five priority fauna have been recorded within the local area (DBCA, 2007-).

The three threatened fauna species are malleefowl (*Leipoa ocellata*), forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), both listed as vulnerable under the *Wildlife Conservation Act 1950* (WC Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and Carnaby's cockatoo (*Calyptorhynchus latirostris*) listed as endangered under the WC Act and EPBC Act.

The former Department of Parks and Wildlife (Parks and Wildlife) advised that, in addition to the above, there are recent records (2000 onwards) of the following conservation significant fauna within 30 kilometres of the application area: chuditch (*Dasyurus geoffroii*; vulnerable), peregrine falcon (*Falco peregrinus*; Other Specially Protected), black-striped snake (*Neelaps calonotos*; Priority 3), and western brush wallaby (*Macropus irma*; Priority 4) (Parks and Wildlife, 2017a).

The malleefowl occurs in shrublands and low woodlands that are dominated by mallee vegetation (DotEE, 2015). Based upon the mapped vegetation type and the findings from the DER site inspection, the application area is unlikely to contain the preferred habitat of this species.

The threatened black cockatoo species have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012). Noting that the application area comprises mainly *Acacia rostellifera* (Fabaceae) and *Melaleuca cardiophylla* (Myrtaceae), the application area is unlikely to contain the preferred foraging habitat for black cockatoos.

Parks and Wildlife advised that the application area does not consist of significant habitat or is unsuitable habitat for the chuditch, peregrine falcon black-striped snake or western brush wallaby (Parks and Wildlife, 2017a).

Noting the condition of the vegetation within the application area, and that the application area contains minimal native understorey, the application area is unlikely to comprise significant habitat for fauna species that occurs within the local area.

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, rare flora.**

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

According to the available datasets, five rare flora species have been recorded within the local area, with the closest being recorded approximately 9.6 kilometres from the application area. According to the available datasets and flora advice provided by Parks and Wildlife (Parks and Wildlife, 2017b), none of these species have been recorded from the same soil or vegetation types as mapped within the application area.

Noting the above, the condition of the vegetation within the application area, and that the application area contains minimal native understorey, the application area is not likely to include, or be necessary for the continued existence of, rare flora.

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**

According to the available datasets, no threatened ecological communities are mapped within the local area. The application area is not likely to comprise the whole or part of, or be necessary for the maintenance of, a threatened ecological community.

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).

As indicated in Table 1, the remaining extents of native vegetation within the bioregion and mapped vegetation association are above the 30 per cent threshold.

Aerial imagery indicates that the local area retains approximately 75 per cent native vegetation cover, with large proportion of this vegetation occurring within conservation areas.

Noting the above, the condition of the vegetation within the application area, and that the application area is not likely to include significant habitat for fauna, rare or priority flora, or ecological communities of conservation significance, the application area is unlikely to be significant as a remnant within an extensively cleared area.

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 DCBA Managed Lands	
				(ha)	(%)
<b>IBRA Bioregion*</b>					
Geraldton Sandplains	3,136,037	1,404,431	45	568,223	40.5
<b>Beard vegetation association in IBRA bioregion:</b>					
433 (Geraldton Sandplains)	32,460	14,746	45.5	1,603	11

**(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 not likely to be at variance to this Principle**

According to the available datasets, no wetlands or watercourses occur within the application area. Un-named watercourses are mapped approximately 210 metres east and 360 metres south of the of the application area. The Arrowsmith River is located approximately 1.1 kilometres from the application area.

Noting the above, the vegetation within the application area is unlikely to be growing in, or in association with, an environment associated with a watercourse or wetland.

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

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

**Proposed is at variance to this Principle**

As discussed in Section 2, the application area is located within the Tamala South 5 and Tamala South 4 Subsystems, comprising sandy soils over limestone (Schoknecht et al., 2004).

The Commissioner of Soil and Land Conservation advised that the above map units include areas assessed to have high to very high susceptibility to wind erosion, and that the risk of wind erosion associated with the proposed clearing and proposed land use is due to a combination of sandy nature of the soils, the extent of the application area and impacts of cropping and grazing (Commissioner of Soil and Land Conservation, 2016; 2018).

The risk of land degradation in the form of waterlogging, water erosion, flooding, eutrophication and salinity from the proposed clearing is low (Commissioner of Soil and Land Conservation, 2016; 2018).

Noting the risk of wind erosion, the proposed clearing is at variance to this Principle.

A wind erosion management condition will be placed on the permit to assist in minimising the risk of land degradation impacts associated with wind erosion.

**(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 the available datasets, the local area contains a number of conservation areas, including the Yordanogo Nature Reserve, Beekeepers Nature Reserve, two un-named nature reserves, three areas under conservation covenants, and two *Land for Wildlife* sites.

The northern portion of the application area is located adjacent to and between the Yordanogo Nature Reserve and an area under a conservation covenant, and is likely to provide a linkage between these conservation areas. The proposed clearing is likely to impact on this linkage, however will not completely sever the linkage as adjacent vegetation will maintain the linkage values.

The southern portion of the application area is located adjacent to an area under a conservation covenant.

Given the close proximity of the application area to conservation areas, there is potential for weeds and dieback to spread or be introduced into these conservation areas as a result of the proposed clearing.

Given the above, the proposed clearing may 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), no watercourses or wetlands occur within the application area.

The Commissioner of Soil and Land Conservation advised that the proposed clearing is unlikely to contribute to nutrient enrichment of surface and/or groundwater bodies in the applied area given the soil types present within the application area (Commissioner of Soil and Land Conservation, 2016; 2018).

The groundwater salinity within the application area ranges between 1,000-7,000 total dissolved solids per milligram per litre. The Commissioner of Soil and Land Conservation advised that there were no signs of salinity within the application area or in adjacent areas, and that no significant changes to groundwater salinity are expected as a result of the proposed clearing (Commissioner of Soil and Land Conservation, 2016; 2018).

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 Commissioner of Soil and Land Conservation advised that the risk of flooding occurring as a result of the proposed clearing is low (Commissioner of Soil and Land Conservation, 2016; 2018).

Given the above, the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding. The proposed clearing is not likely to be at variance to this Principle.

**3. Planning instruments and other relevant matters.**

The original application was for the clearing of 1,001 hectares of native vegetation, and included a 611 hectare remnant patch that was predominately in an excellent (Keighery, 1994) condition (DER, 2016). Following consideration of the environmental impacts of the proposed clearing (as outlined in Section 4 below), the applicant revised the application area to 291 hectares (as indicated in Figure 1) comprising of vegetation in a degraded (Keighery, 1994) to completely degraded (Keighery, 1994) condition.

The original application was advertised in *The West Australian* newspaper on 26 September 2016 for a 21-day public submission period. One submission was received in relation to the proposed clearing. The submission raised concerns about the impacts of the original application in relation to biodiversity values, and the potential impacts to conservation significant flora, fauna and ecological communities, and an ecological linkage (Submission, 2016). These matters are discussed under Principles (a), (b), (c), (d) and (h).

The application area is zoned 'general farming' under the Shire of Irwin Local Planning Scheme No. 5.

The application area is located within the Arrowsmith Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act). The former Department of Water advised that the proposed end landuse does not trigger a requirement for groundwater licensing or permitting under the RiWI Act (DoW, 2016).

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

**4. Applicant's submission**

On 19 June 2017, a DER Delegated Officer wrote to the applicant, outlining the environmental impacts identified during the assessment of the application, advising that additional information would be required to inform the assessment of clearing impacts in relation to larger remnant of vegetation, including fauna, flora and vegetation surveys, and inviting the applicant to provide advice on how the impacts would be avoided or minimised (DWER ref. A1456714).

In response to the Delegated Officer's letter, the applicant indicated that the application area could be reduced to avoid and minimise impacts, including measures including avoiding copses of flora and mature trees, and focussing on the development of areas containing degraded vegetation in a manner that minimises the risk of wind erosion (DWER ref. A1478120). During a meeting with officers of the Department of Water and Environmental Regulation (DWER) on 7 September 2017, the applicant advised that a revised application would be provided.

On 18 October 2017, a DWER Delegated Officer wrote to the applicant, inviting the applicant to provide details of the revised application (DWER ref. A1543143). In response, the applicant revised the application area to approximately 291 hectares of native vegetation in degraded to completely degraded condition (as indicated in Figure 1).

## 5. References

- Commissioner of Soil and Land Conservation (2016) Land Degradation Assessment Report for Clearing Permit Application CPS 7252/1 (DWER ref. A1194503).
- Commissioner of Soil and Land Conservation (2018) Revised land degradation advice for revised Clearing Permit Application CPS 7252/1 (DWER ref. A1637763).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.
- Department of Biodiversity Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed November 2017
- Department of Environment Regulation (DER) (2016) Site visit report for clearing permit application CPS 7252/1, conducted 13 October 2016 (DWER ref. A1323822).
- Department of Parks and Wildlife (2017a) Fauna advice provided in relation to Clearing Permit Application CPS 7252/1 (DWER ref. A1356393).
- Department of Parks and Wildlife (2017b) Flora advice provided in relation to Clearing Permit Application CPS 7252/1 (DWER ref. A1356391).
- Department of the Environment (2015). Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt. Canberra: Department of the Environment and Energy. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/128-conservation-advice.pdf>. In effect under the EPBC Act from 4 December 2015.
- Department of the Environment and Energy (DotEE) (2015) 'Leipoa ocellata' in Species Profile and Threats Database, Department of the Environment, Canberra.
- Department of Water (DoW) (2016) Water licensing advice provided in relation to Clearing Permit Application CPS 7252/1 (DWER ref. A1420228).
- Government of Western Australia (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Parks and Wildlife, Perth.
- 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.
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- 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.
- Submission (2016) Submission received in relation to Clearing Permit Application CPS 7252/1 (DWER ref. A1176800).

### GIS Databases:

- Aboriginal Sites of Significance
- DBCA Estate
- DEC Covenant
- Groundwater salinity
- Hydrography, linear
- Remnant vegetation
- SAC bio datasets (accessed March 2018)
- Soils, Statewide
- Topographic contours
- Wetlands