



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7454/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Mr Peter Kuiper

### 1.3. Property details

Property: LOT 1683 ON PLAN 208472, WEST RIVER  
Local Government Authority: RAVENSTHORPE, SHIRE OF  
DER Region: South Coast  
DPaW District: ALBANY  
Localities: WEST RIVER

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 128                |           | Burning            | Grain production    |

### 1.5. Decision on application

**Decision on Permit Application:** Refusal  
**Decision Date:** 16 October 2017  
**Reasons for Decision:** The application for a permit to clear 150.47 hectares of native vegetation for the purpose of grain production was received on 25 January 2017. On 13 July the applicant reduced the application area to 128 hectares in response to environmental issues raised by the preliminary assessment.

The application has been assessed in accordance with the requirements of section 510 of the *Environmental Protection Act 1986* (EP Act).

Decision to refuse the application:  
The Delegated Officer determined that the proposed clearing is seriously at variance to Principle (g), given the potential for land degradation in the form of salinity. Under section 510(3) of the EP Act, the CEO may make a decision that is seriously at variance with the clearing principles if, and only if, in the CEO's opinion there is a good reason for doing so.

Clearing that has a significant impact on the environment is generally not supported unless there is a good reason for allowing the impacts, such as public benefit or an underlying State planning instrument or policy that identifies the area as a priority area that should be developed.

Noting the significant environmental impact in the form of land degradation identified during the assessment of the application, and in the absence of a good reason to consider granting this application, the Delegated Officer determined to refuse to grant a clearing permit.

An assessment was not conducted against the remaining clearing Principles given the assessment of land degradation impacts.

## 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  |
|--|--|---|--|
| One Beard vegetation association is mapped within the application area. Beard vegetation association 940 is described as Mosaic: Shrublands; mallee scrub, black marlock / | The applicant proposes to clear up to 128 hectares within Lot 1683 on Deposited Plan 208472, West River, for | Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994). | The condition of the vegetation within the application area was determined by a former Department of |

Shrublands; tallerack mallee-heath (Shepherd et al., 2001).

the purpose of grain production.

To

Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Environment Regulation (DER) [now Department of Water and Environmental regulation (DWER)] site inspection on 13 March 2017 (DER, 2017).

### 3. Assessment of application against clearing principles

#### Comments

The original application was to clear 150.47 hectares of native vegetation within Lot 1683 on Deposited Plan 208472, West River, for the purpose of grain production. As discussed under Planning instruments and other relevant matters, the application was reduced by 22 hectares and amended to 128 hectares.

A site inspection undertaken by former DER [now DWER] officers on 13 March 2017 determined that the majority of the application area is in a very good (Keighery, 1994) condition, with areas in a degraded (Keighery, 1994) condition with a high number of weed species (DER, 2017). The vegetation within the application area consists of *Banksia falcata*, *Patersonia occidentalis*, *Lepidosperma* sp., *Mesomelaena stygia*, *Eucalytus* sp., *Allocasuarina* sp., *Leucopogon* sp., *Synaphea* sp., *Melaleuca* sp., *Myrtaceae* sp., *Boronia* sp., *Cryptandra* sp., *Petrophile* sp., *Rhamnaceae* sp *Acacia* sp., *Stylidium* sp., *Conostylis* sp., and *Lysinema* sp. The application area has been previously cleared by blade ploughing for agricultural purposes and most tree stumps were removed. A majority of the application area has now regenerated to a very good (Keighery, 1994) condition (DER, 2017).

Mapping of the application area identifies that:

- Salinity risk: The application area is within a map unit of which 30 to 50 per cent has a moderate to high salinity risk or is presently saline;
- Waterlogging: Half of the application area is within a map unit of which over 3-10 per cent has a moderate to high risk of waterlogging and the remaining half of the application area is within a map unit of which <3 per cent has a moderate to high risk of waterlogging;
- Subsurface compaction: The application area is within a map unit of which 10 to 30 per cent has a high subsurface compaction risk.
- Subsurface acidification: The application area is within a map unit of which 30 to 50 percent has a high subsurface acidification risk or is presently acid;
- Wind erosion: Half of the application area is within a map unit of which over 10 to 30 per cent has a high risk of water erosion and the remaining half of the application area is within a map unit of which 30 to 50 per cent has a high risk of water erosion;
- Water repellance: The application area is within a map unit of which 10 to 30 per cent has a high risk of water repellance; and
- Water erosion: The application area is within a map unit of which <3 per cent has a high risk of water erosion.

The Commissioner of Soil and Land Conservation (Commissioner) arranged a site inspection which was conducted by the Department of Agriculture and Food Western Australia (DAFWA) on 21 March 2017. DAFWA provided a land degradation report based on the results of the inspection (CSLC, 2017a).

The land degradation report noted that "hydrological information has been identified for the area surrounding the proposed clearing. Since clearing began in the catchment there has been outbreaks of salinity along the main drainage lines. Several drilling programs to monitor groundwater changes in the area have been conducted since about 1997" (CSLC, 2017a). The land degradation report noted that "The salinity of the bores, the shallow depth of the groundwater and onsite observations, of saline affected vegetation in different area, indicate the clearing of native vegetation is very likely to significantly increase salinity and further rise in table levels in the proposed area to clear and also downslope from the proposed area to clear, especially in the tributaries" (CSLC, 2017a). The land degradation report also noted that "current soil mapping risk assessment is not consistent with bore data and on ground observations (CSLC, 2017a).

The Commissioner advised that unpublished DAFWA land resource survey mapping indicates "that the application area is comprised of two land units. These are Upper Fitzgerald 8 subsystem, map unit 243Jm\_8 and the Lower Fitzgerald 5 Subsystem, map unit 243Lf\_5 (CSLC, 2017a).

The Commissioner advised that the "application area is located on the mid and upper land slope positions in the landscape and drains towards the Hammersley River. The vegetation is blue mallee and proteaceous heath in good condition to very good condition. It is regrowth vegetation, having been cleared without a "notice of intention to clear" about 25 years ago" (CSLC, 2017a).

The Commissioner advised that the available ground water monitoring data indicate the presence of shallow saline ground water tables that were relatively static or rising over the monitoring period. These are consistent with the occurrence of secondary salinity observed on the property (CSLC, 2017a).

The Commissioner advised that there is a high risk of land degradation in the form of on-site and offsite salinity occurring if the proposed land clearing of about 150 hectares is carried out and the existing deep rooted perennial native vegetation is replaced with annual cereal or canola crops (CSLC, 2017a).

The Commissioner concluded that the proposed clearing is likely to cause appreciable land degradation and is seriously at variance to principle (g) for salinity (native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation) (CSLC, 2017a).

Based on the high risk of land degradation in the form of salinity, the proposed clearing is seriously at variance to principle (g). Therefore, the proposed clearing of 128 hectares of native vegetation is likely to have an unacceptable risk to the environment.

An assessment against the remaining clearing Principles has not been conducted given the significant environmental impact in the form of land degradation that will occur if clearing is carried out.

**Methodology**      References:  
DER (2017)  
CSLC (2017a)  
Keighery (1994)

GIS Databases:  
- Aerial imagery  
- Hydrography, linear  
- Remnant vegetation  
- Topography, statewide

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

**Comments**      The original application was to clear 150.47 hectares of native vegetation within Lot 1683 on Deposited Plan 208472, West River, for the purpose of grain production. As discussed below, the application was amended to 128 hectares.

The Shire of Ravensthorpe advised that Lot 1683 is zoned 'General Agriculture' by the shires Town Planning Scheme No. 5 and broad acre farming is a permitted use. The Shire of Ravensthorpe advised that they have no objection to the proposed clearing (Shire of Ravensthorpe, 2017).

The application was received by the Department of Environment Regulation on 24 October 2016 and advertised in *The West Australian* newspaper on 27 February 2017 and online on 21 February 2017 for a period of 21 days. One submission from the public was received in relation to this application.

The submission received raised concerns regarding impacts to significant habitat for rare and priority flora. These concerns would be addressed in clearing principles (a), (c), and (e), however, an assessment against the remaining clearing principles has not been conducted given the significant environmental impact in the form of land degradation that will occur if clearing is carried out.

No Aboriginal Sites of Significance have been recorded within the application area.

Under Section 51O(3) the Chief Executive Officer may make a decision that is seriously at variance with the clearing principles if, and only if, in the Chief Executive Officer's opinion there is a good reason for doing so. Clearing that has a significant impact on the environment is generally not supported unless there is a good reason for allowing the impacts, such as public benefit or an underlying State planning instrument or policy that identifies the area as a priority area that should be developed. In this instance, there are no State planning policies or other extenuating circumstances relating to the application area.

On 26 June 2017, a DER Delegated Officer wrote to the applicant advising that a preliminary assessment of the application identified a significant land degradation risk from the proposed clearing. The Delegated Officer advised of the intent to refuse the application for a clearing permit and provided the applicant with 30 days in which to make submissions on the proposed decision.

**Methodology**      References:  
CSLC (2017b)  
Shire of Ravensthorpe (2017)

GIS Databases:  
- Environmentally Sensitive Areas

#### **4. Applicants submission**

On 13 July 2017, the Applicant provided a response to DWER which contained measures and management actions to address the significant impacts in the form of land degradation. The applicant proposed to change the land use to a mix of meat production and grain production; add buffers on waterways and decrease the application area by 22 hectares (150.47 hectares to 128 hectares); and rehabilitate and replant native vegetation. The applicant also provided a management plan in relation to production rotation of an additional 3 areas on the property.

On 28 July 2017, a DER Delegated Officer sought additional advice from the Commissioner on the applicant's revised application area and proposed mitigation measures.

On 18 August 2017, the Commissioner advised that;

*"In assessing the amended proposal I have referred to Mr Firth's report that was previously provided to your office as well as personal knowledge of the area and experience with the proposed Lucerne/cereal phase cropping system.*

*The local hydrology in this area is probably a combination of local and intermediate groundwater systems. The whole landscape, both hill slopes and valley floors contribute groundwater recharge to the saline water table. Salinity typically occurs in the depressions and valley floors where when the ground water table rises to within 1.5m of the land surface.*

*Water tables in this area were rising until about 2000 and since then were generally static or rising depending upon the time since land clearing. Recent monitoring of the saline ground water tables in the region again indicates a rising trend.*

*The amended application proposes to increase the width of the native vegetation buffers on the drainage lines as well as rehabilitating 15 ha of degraded waterways. This is laudable on a number of grounds. However, without management of groundwater recharge over the whole of the contributing catchment, the risk of secondary salinity occurring on this land post clearing remains.*

*Mr Kuiper has also proposed adopting a Lucerne/crop phase system of land use over the application area and an additional 138 ha located up gradient. The adoption of this system of land use has been demonstrated by a number of farmers and the Department of Agriculture and Food (DAFWA) now DPIRD, to reduce ground water recharge, as well as generating greater whole farm profitability, following the long term adoption of this system.*

*Unfortunately, the level of adoption of this farming system over the past 25 years has been very low in Western Australia, despite the benefits of improved crop and livestock production and less salinity. Some of the reasons for this failure include the increased complexity of cropping, pasture and grazing management, changes to flock structure and sheep enterprise that effect the whole farm business operation.*

*Also, success of the Lucerne is dependent upon establishing and maintaining sufficient plants through to the end of the phase (about 10/sq m). This has often proven difficult to achieve.*

*The efficacy of Lucerne reducing ground water recharge is generally lower on sandy and gravelly duplex soils occurring within the application area. (These were mapped by DAFWA and described as Upper Fitzgerald 8 subsystem, map unit 243jm\_8 and the Lower Fitzgerald 5 subsystem, map unit 243lf\_5.*

*Should a permit be issued to authorise the proposed clearing on the basis that the expression of salinity would be reduced, it is relevant that there is no effective mechanism to enforce the proposed Lucerne/phase cropping system of land use. The ongoing (in perpetuity) successful implementation of this system is necessary to reduce the ground water recharge to achieve the desired salinity reduction benefits.*

*Therefore, I am of the opinion that there is significant uncertainty that the system would be successfully implemented in perpetuity and conclude that the proposed clearing is likely to cause appreciable land degradation and is seriously at variance with principle g for salinity." CSLC (2017b).*

Noting the Commissioner remains of the opinion that the proposed clearing is seriously at variance with principle g, the applicant has been unable to address the environmental issues raised during the assessment of the application.

Methodology     References:  
                         CSLC (2017b)

## 5. References

- Commissioner of Soil and Land Conservation (CSLC)(2017a) Land degradation assessment report for Clearing Permit Application CPS 7454/1. Department of Agriculture and Food Western Australia (DER Ref: A1423452).
- Commissioner of Soil and Land Conservation (CSLC)(2017b) Assessment of Amended Application CPS 7454/1 to clear native vegetation within Lot 1683 on Deposited Plan 208472, P Kuiper, West River, Shire of Ravensthorpe. Department of Agriculture and Food Western Australia (DER Ref: A1508932).
- Department of Environment Regulation (DER) (2017) Site Inspection Report for Clearing Permit Application CPS 7454/1. Site inspection undertaken 13 March 2017. Department of Environment Regulation, Western Australia (DER Ref: A1425305).
- 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 Ravensthorpe (2017) Planning and environment advice for clearing permit application CPS 7454/1. Received on 23 February 2017 (DER Ref: A1382130).