Department of Environment
Government of Western Australia

# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

**Permit application No.:** 819/1
**Permit type:** Purpose Permit

### 1.2. Proponent details

**Proponent's name:** **Shire of Wagin**
**Postal address:** Po Box 200 Wagin WA 6315
**Contacts:** Phone: 9861 1177
Fax: 9861 1204
Email: shire@wagin.wa.gov.au

### 1.3. Property details

**Property:**
ROAD RESERVE ( JALORAN 6315)
ROAD RESERVE ( MINDING 6315)
ROAD RESERVE ( MINDING 6315)
ROAD RESERVE ( WEDGECARRUP 6315)
ROAD RESERVE ( WEDGECARRUP 6315)
ROAD RESERVE ( WEDGECARRUP 6315)
ROAD RESERVE ( COLLANILLING 6315)
ROAD RESERVE ( COLLANILLING 6315)
ROAD RESERVE ( GUNDARING 6315)
ROAD RESERVE ( PIESSEVILLE 6315)
ROAD RESERVE ( PIESSEVILLE 6315)
ROAD RESERVE ( PIESSEVILLE 6315)
ROAD RESERVE ( MINDING 6315)
ROAD RESERVE ( MINDING 6315)
ROAD RESERVE ( MINDING 6315)
ROAD RESERVE ( MINDING 6315)
ROAD RESERVE ( JALORAN 6315)
LOT 5389 ON PLAN 117645 ( PIESSEVILLE 6315)
ROAD RESERVE ( PIESSEVILLE 6315)
LOT 5554 ON PLAN 117646 ( PIESSEVILLE 6315)
LOT 10329 ON PLAN 145132 ( PIESSEVILLE 6315)
LOT 1333 ON PLAN 104698 ( MINDING 6315)
LOT 1937 ON PLAN 108645 ( MINDING 6315)
LOT 3995 ON PLAN 233450 ( MINDING 6315)
LOT 982 ON PLAN 102879 ( WEDGECARRUP 6315)
LOT 46 ON PLAN 245818 (House No. 523 BOYALLING WEDGECARRUP 6315)
LOT 410 ON PLAN 256318 (House No. 502 TAYLORS WEDGECARRUP 6315)
LOT 1046 ON PLAN 102802 ( WEDGECARRUP 6315)
LOT 2062 ON PLAN 108661 ( WEDGECARRUP 6315)
LOT 111 ON PLAN 122224 ( WAGIN 6315)
LOT 4 ON PLAN 113433 ( WAGIN 6315)
LOT 1 ON DIAGRAM 78705 (House No. 34 GUNDARING GUNDARING 6315)
WILLIAMS LOCATION 5548 ( BALLAYING 6315)
LOT 4838 ON PLAN 115661 ( COLLANILLING 6315)
CROWN RESERVE 5998 ( COLLANILLING 6315)
LOT 12691 ON PLAN 147130 ( COLLANILLING 6315)
LOT 4219 ON PLAN 115412 ( JALORAN 6315)
LOT 9283 ON PLAN 141328 ( JALORAN 6315)

**Colloquial name:**

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|---|---|---|---|
| 45.3 | | Mechanical Removal | Road construction or maintenance |
| 14.7 | | Mechanical Removal | Extractive Industry |

## 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 |
|---|---|---|---|
| Medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia)<br>Medium woodland; wandoo & mallet<br>Succulent steppe with open woodland & scrub; wandoo, salmon gum & Allocasuarina obesa over teatree & samphire<br>Medium woodland; marri & wandoo<br>Shrublands; dryandra heath<br>Medium woodland; wandoo & yate | Aerial photography shows that some of the areas to be cleared for the road works and gravel pits have been previously cleared. However, many of these areas are vegetated and occur within a broader landscape that has been extensively cleared. | Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) | Vegetation to be cleared description based on aerial photograph interpretation (GIS Database - Dumbleyung Kukerin 1.4m Orthomosaic - DLI 02) |

## 3. Assessment of application against Clearing Principles

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

**Comments**

**Proposal may be at variance to this Principle**

The proposal is for the clearing of sixty hectares of native vegetation for gravel extraction and road maintenance in the Shire of Wagin. There are a range of vegetation types present with york gum, wandoo and salmon gum woodland predominating. The percentage remaining of this vegetation type is below 10%. Aerial photography indicates that while some of the areas to be cleared have been previously cleared, many of the gravel pits and road reserves are vegetated and occur within a broader landscape that has been extensively cleared. Therefore, the proposal may be at variance to this principle.

To mitigate any loss of biodiversity within the road reserves and surrounding areas, conditions have been imposed on the permit related to flora and fauna management. Additionally, due to the highly cleared nature of the Shire, a condition has been imposed to offset the values of the area to be cleared.

**Methodology**

Application for a Purpose permit (DoE Trim Ref )
Shepherd et al (2001)
GIS Databases:
- Wagin 50cm Orthomosaic - DLI06
- Dumbleyung Kukerin 1.4m Orthomosaic - DLI 02
- Kojonup 1.4m Orthomosaic - DLI 01
- CALM Managed Lands and Waters - CALM 1/07/05_1
- Pre-European Vegetation - DA 01/01

### (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**

**Proposal may be at variance to this Principle**

Biodiversity Coordination Section, DEC advises that a number of threatened and priority fauna species are known to occur in the Shire of Wagin. Threatened fauna records within a five kilometre radius of the proposed clearing include:
Chuditch;
Forest Red-tailed Black-Cockatoo;
Malleefowl;
Numbat;
Red-tailed Phascogale;
Western Rosella (inland ssp); and
White-tailed Black Cockatoo.

To ensure any threatened species are identified and managed accordingly, a condition has been imposed on the permit to ensure an inspection is undertaken by a fauna specialist to identify the presence of any threatened species within the areas proposed for clearing (DEC 2006).

**Methodology**

Biodiversity Coordination Section, DEC (2006) TRIM Ref. DOC5198

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

**Comments**

**Proposal may be at variance to this Principle**

There is a large number of known occurrences of declared rare flora (DRF) and priority flora in the Shire of Wagin. DRF species within a five kilometre radius of the proposed clearing include:
Calectasia pignattiana;

Conostylis dummondii;
Banksia oligantha;
Centrolepis caespitosa;
Jacksonia velveta;
Verticordia fimbrilepis subsp. fimbrilepis;
Caladenia dorrienii;
Eleocharis keigheryi; and
Hemigenia ramosissima.

Priority flora species present include;
Schoenus sp. Beaufort (P1);
Andersonia carinata (P2);
Stylidium emarginutum subsp. exappediculatum (P2);
Dryandra acanthopoda (P2);
Primelea neokyrea (P2);
Leucopogon florulentus (P3);
Stylidium rhipidium (P3);
Phyllangium palustre (P3);
Synaphea platyphylla (P3);
Eucalyptus latens (P4);
Caladenia integra (P4);
Lechenaultia pulvinaris (P4); and
Wurmbea drummondii (P4).

These records occur on the same vegetation type as the proposed clearing, with some of the records occuring in nature reserves.

To ensure all DRF and priority species are identified and managed accordingly, a condition has been placed on the permit to ensure surveys are undertaken by a flora specialist to identify the presence of any DRF or priority species within the areas proposed for clearing. Where DRF species are identified the Shire will be required to submit the records to the Department of Environment and Conservation ensuring no species are removed unless approved by the CEO. In addition, a condition has been imposed to offset the values of the area to be cleared, including the priority flora species.

**Methodology** Biodiversity Coordination Section, DEC (2006) TRIM Ref. DOC5198
GIS databases:
- Declared Rare and Priority Flora List - CALM 01/07/05
- Pre-European Vegetation - DA 01/01

**(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** **Proposal is not likely to be at variance to this Principle**
There are no known records of threatened ecological communities in the vicinity of the proposed clearing (the nearest is approximately 13 kilometres away). Therefore, it is unlikely that the proposed clearing is at variance with this principle.

**Methodology** GIS Databases:
- Threatened Ecological Communities - CALM 12/4/05

**(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** **Proposal may be at variance to this Principle**
The proposed clearing occurs within the Avon Wheatbelt IBRA Region, where the area of vegetation remaining is 16%, and the area of vegetation remaining with in the intensive landuse zone is 10.3%. The vegetation extent in the Shire of Wagin is 8.2% (Shepherd et al. 2001). The vegetation of the Shire of Wagin has been mapped by Hopkins et al. (2001). The roads predominantly traverse vegetation type 1023 where there is 5.5% remaining, which is considered 'Endangered' (Department of Natural Resources and Environment 2002). Aerial photography indicates that the vegetation condition ranges from cleared areas with no intact vegetation to areas that are vegetated and provide connectivity to vegetated areas in a largely cleared landscape. This proposal may be at variance to this principle.

To mitigate any potential impacts of the clearing on remnant vegetation, while acknowledging the need to maintain and upgrade roads, the proposed clearing will be carried out in accordance with a condition imposed on the permit requiring that clearing of vegetation be avoided, and where this is not possible, minimised. In addition, to address the loss of vegetation within a highly cleared landscape, a condition has been imposed to offset the values of the area to be cleared.

| Pre - European (ha)* | Current Extent (ha)* | Remaining % | Conservation Status ** |
|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| IBRA Bioregion *** | | | | |
| - Avon Wheatbelt | 9,578,995 | 924,828 | 10.3 | Vulnerable |
| Shire - Wagin | 193,910 | 15,847 | 8.2 | Endangered |
| Beard Unit - | | | | |
| 1023 | 1603374.971 | 104580.845 | 6.5 | Endangered |
| 1073 | 18172.214 | 6021.538 | 33.1 | Depleted |
| 1083 | 10435.914 | 2208.537 | 21.2 | Vulnerable |
| 125 | 3526285.719 | 3249187.932 | 92.1 | Least concern |
| 4 | 1056783.500 | 248065.211 | 23.5 | Vulnerable |
| 952 | 59219.091 | 9390.732 | 15.9 | Vulnerable |
| 967 | 102824.994 | 12498.101 | 12.2 | Vulnerable |

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)
*** Within the Intensive Landuse Zone

**Methodology** Shepherd et al (2001)
Hopkins et al (2001)
Department of Natural Resources and Environment (2002)
GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Pre-European Vegetation - DA 01/01
- Wagin 50cm Orthomosaic - DLI06
- Kojonup 1.4m Orthomosaic - DLI 01
- Dumbleyung Kukerin 1.4m Orthomosaic - DLI 02

## (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**

**Proposal is not likely to be at variance to this Principle**

The areas proposed to be cleared are adjacent to some areas subject to inundation and the roads intersect with a number of watercourses. However, as many of the roads appear to have been previously cleared and drains and culverts are likely to be installed to manage the flow of watercourses, the proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Databases:
- ANCA, Wetlands - CALM 08/01
- Rivers 250K - GA
- Lakes 250K - GA
- System 1 to 5 and 7 to 12 Areas - DEP 06/95

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

**Comments**

**Proposal is not likely to be at variance to this Principle**

The Department of Agriculture and Food Western Australia (DAFWA) did not undertake a comprehensive assessment of the land degradation risks associated with the proposed clearing, however their advice indicated that the proposal is not likely to cause land degradation(DAFWA 2005).

The proposed clearing for gravel extraction an roadside maintenance may cause some short term land degradation issues related to localised flooding and soil erosion during works. However, these issues should be minimal as the existing roads have in place roadside infrastructure to prevent land degradation associated with roads ie. table drains and culverts. To minimise long term land degradation associated with gravel extraction a condition has been imposed requiring revegetation on completion of the extraction.

**Methodology** DAFWA (2005) TRIM Ref. IN24130

## (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**

**Proposal may be at variance to this Principle**

The areas proposed to be cleared are not within conservation areas, however some of the roads are adjacent to these areas. The percentage of the main vegetation association impacted (1023) found within conservation reserves is 16.2%. In addition, aerial photography indicates that the roadsides, where vegetated, could serve as connectivity between nature reserves in a largely cleared landscape.

To mitigate any potential impacts of the clearing on the environmental values of any adjacent or nearby conservation area the proposed clearing will be carried out in accordance with a condition imposed on the permit requiring that clearing of vegetation be avoided, and where this is not possible, minimised.

**Methodology** GIS Databases:
- CALM Managed Lands and Waters - CALM 1/07/05_1
- Register of National Estate - EA 28/01/03_1
- Wagin 50cm Orthomosaic - DLI06
- Dumbleyung Kukerin 1.4m Orthomosaic - DLI 02
- Kojonup 1.4m Orthomosaic - DLI 01
- Pre-European Vegetation - DA 01/01

### (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**

**Proposal is not likely to be at variance to this Principle**

The Dumbleyung Catchment Area is approximately 12 kilometres from Jefferis Road.

Mapped goundwater salinity in the vicinity ranges from 14000 to greater than 35 000 milligrams per litre.

The proposed clearing on the roadsides may cause some short term localised surface water sedimentation during works. However, these issues should be minimised through putting in place appropriate roadside infrastructure such as table drains and culverts.

**Methodology** GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06
- Groundwater Salinity, Statewide - 22/02/00
- WIN Groundwater Sites, Monitoring - DEWCP (Current)_1
- WIN Surface Water Sites, Stream Gauging - DEWCP (Current)

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

**Comments**

**Proposal is not likely to be at variance to this Principle**

Due to the scale and the nature of the proposed clearing it is unlikely to exacerbate flooding in the local area.

**Methodology** GIS Databases:
- Topographic Contours, Statewide - DOLA 12/09/02

### Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

**Comments**

One submission was received in relation to the proposal. The submitter requests the preparation of a roadside vegetation management plan, which is to include alternatives to the clearing, and suggests the proposal is contrary to the EPA's Position Statement No. 2 - Environmental Protection of Native Vegetation in Western Australia. There is no requirement for the proponent to prepare a vegetation management plan and a plan is not needed for assessment of the proposal. It is recognised that significant clearing of native vegetation has already occurred in the agricultural area which has led to a reduction in biodiversity. To mitigate any potential impacts of the clearing on remnant vegetation, while acknowledging the need to maintain and upgrade roads, the proposed clearing will be carried out in accordance with a condition imposed on the permit requiring that clearing of vegetation be avoided, and where this is not possible, minimised. In addition, to address the loss of vegetation within a highly cleared landscape, a condition has been imposed to offset the values of the area to be cleared.

There are three Native Title Claims over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

There is no RIWI Act Licence or Works approval required for the proposed works.

**Methodology** GIS Databases:
- Aboriginal Sites of Significance - DIA 28/02/03
- Native Title Claims - DLI 07/11/05

## 4. Assessor's recommendations

| Purpose | Method | Applied area (ha)/ trees | Decision | Comment / recommendation |
|---|---|---|---|---|
| Extractive Industry | Mechanical Removal | 14.7 | | The assessable criteria have been addressed. The assessment identified the proposal is may be at variance to five of the clearing principles. The potential |

| | | | |
|---|---|---|---|
| | | | impacts of the clearing will be mitigated through permit conditions. The assessing officer therefore recommends that the permit be granted. |
| Road construction or maintenance | Mechanical Removal | 45.3 | |

## 5. References


Biodiversity Coordination Section, DEC (2006) Land clearing proposal advice (Specific Biodiversity advice). Department of Environment and Conservation, Western Australia (TRIM Ref. DOC5198)

Correspondence from the Department of Agriculture and Food WA (DAFWA) 'Application for Clearing Permit CPS 819/1 - Purpose permit - Shire of Wagin' dated 4 October 2005 (TRIM Ref IN24130)

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

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.