



1. Application details

1.1. Permit application details

Permit application No.: 643/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Dumbleyung
Postal address: P.O. Box 99 Dumbleyung WA 6350

1.3. Property details

Property:
LOT 11128 ON PLAN 84457 (TINCURRIN 6361)
LOT 4617 ON PLAN 114534 (HARRISMITH 6361)
LOT 15019 ON PLAN 208541 (DUDININ 6363)
LOT 11100 ON PLAN 228733 (NYABING 6341)
LOT 9992 ON PLAN 145095 (NYABING 6341)
LOT 9174 ON PLAN 233551 (SOUTH DATATINE 6317)

Colloquial name:

1.4. Application

| | | | |
|--------------------|-----------|--------------------|----------------------------------|
| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
| 4 | | Mechanical Removal | Road construction or maintenance |

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 |
|---|---|--|--|
| Bare areas; rock outcrops Mosaic: Medium woodland; salmon gum & gimlet / Shrublands; mallee scrub, redwood & black marlock Medium woodland; York gum & salmon gum Hummock grassland, mixed sandplain - sparse low trees over sparse dwarf shrubs with spinifex; marble gum & red mallee mixed dwarf shrubs with <i>Triodia scariosa</i> & <i>Triodia</i> sp. Shrublands; dryandra heath Mosaic: Shrublands; scrub-heath (Roe) / Shrublands; <i>Allocasuarina campestris</i> thicket Medium woodland; York gum, wandoo & salmon gum (<i>Eucalyptus salmonophloia</i>) Medium woodland; wandoo, York gum & morrell Succulent steppe with open woodland & thicket; eucalypts & <i>Allocasuarina obesa</i> over teatree & samphire Mosaic: Medium woodland; York gum & salmon gum / Shrublands; mallee scrub <i>Eucalyptus eremophila</i> & black marlock Shrublands; mallee scrub, <i>Eucalyptus eremophila</i> & black marlock (<i>Eucalyptus redunca</i>) Shrublands; scrub-heath in the Mallee Region | Aerial photography shows that some of the areas to be cleared for the road maintenance works have been previously cleared. However, many of these road reserves 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 four hectares of native vegetation within road reserves for road widening in the Shire of Dumbleyung. There are a range of vegetation types present with york gum, wandoo and salmon gum woodland; mallee scrub, Eucalyptus eremophila and black marlock shrubland; and mallee heath predominating. Of the various vegetation types present, the percentage remaining of these types is typically below 30% with the three predominant vegetation types below 10%. Aerial photography indicates that while some of the areas to be cleared have been previously cleared, many of the 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 IN21669)
GIS Databases:
- Dumbleyung Kokerin 1.4m Orthomosaic - DLI 02
- 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 is not likely to 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 Dumbleyung. However, the proposal is unlikely to have a significant impact on any of these species (DEC 2006).

Methodology Biodiversity Coordination Section, DEC (2006) TRIM Ref. DOC4436

(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 within the Shire of Dumbleyung. DRF species include Lechenaultia loricata, Thelymitra stellata, Acacia depressa, Calceolaria pignattiana, Conostylis rogeri, Conostylis drummondii and Conostylis Seorsiflora subsp. trichophylla. Seventy priority flora species have been identified in the Shire of Dumbleyung including; Dryandra conferta var. parva, Dryandra erythrocephala var. inopinata, Dryandra foliosissima, Gastrolobium densifolium, Gastrolobium rigidum, Acacia trinalis, Acacia drewiana sub. sp. minor, Synaphea cervifolia, Synaphea tripartita, Bossiaea divaricata, Thysanotus tenuis, Calothamnus affinis, Rinizia affinis, Boronia ericifolia, Microcorys lenticularis and Lechenaultia pulvinaris species. These records occur on the same vegetation type as the proposed clearing, with many of the records occur in nature or water reserves.

To ensure all DRF and priority species are identified and managed accordingly, a condition will be 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. DOC4436
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 being more than 40 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 and Mallee IBRA Regions, where the area of vegetation remaining within the intensive landuse zone is 10.3% and 19.5% respectively. The vegetation extent in the Shire of Dumbleyung is 9.5% (Shepherd et al. 2001). The vegetation of the Shire of Dumbleyung has been mapped by Hopkins et al. (2001). The roads predominantly traverse vegetation types 131, 1023 and 1094 where there is 7.2%, 5.5% and 4.7% remaining respectively, all of which are 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 nature reserves 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 |
| - Mallee | 7,404,398 | 806,971 | 19.5 | Vulnerable |
| Shire - Dumbleyung | 253,816 | 24,003 | 9.5 | Endangered |
| Beard Unit - | | | | |
| 128 | 412,121 | 325,830 | 79.1 | Least concern |
| 131 | 387,141 | 27,707 | 7.2 | Endangered |
| 142 | 1,134,385 | 281,570 | 24.8 | Vulnerable |
| 532 | 24,562 | 24,562 | 100 | Least concern |
| 952 | 70,253 | 10,575 | 15.1 | Vulnerable |
| 961 | 37,131 | 4,604 | 12.4 | Vulnerable |
| 1023 | 1,698,453 | 92,709 | 5.5 | Endangered |
| 1073 | 21,268 | 6,164 | 29 | Vulnerable |
| 1092 | 93,999 | 5,222 | 5.6 | Endangered |
| 1093 | 9,924 | 759 | 7.6 | Endangered |
| 1094 | 87,192 | 4,130 | 4.7 | Endangered |
| 2048 | 383,125 | 176,608 | 46.1 | Depleted |

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** Within the Intensive Landuse Zone

Methodology GIS Databases:
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00
 - Pre-European Vegetation - DA 01/01
 - 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 not associated with any wetlands. The roads do intersect with a number of watercourses, however, as many of the roads appear to have been previously cleared and where necessary drains and culverts will 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

(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 recommended that a management plan be prepared to cover any surface water runoff implications of the proposed works (DAFWA 2005).

As the proposed clearing on the roadsides may cause some short term land degradation issues related to localised flooding and soil erosion during works, roadside infrastructure such as table drains and culverts should be put in place to minimise the impact of these works. Additionally, a condition placed on the permit to undertake revegetation on completion of the road works will minimise long-term land degradation associated with the clearing.

Methodology DAFWA (2005) TRIM Ref. IN23624
Officer Jessica Dorricott

(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. These include Tarin Rock, Hurdle Creek, Dongolocking, Cronin and Mount Pleasant Nature Reserves. Tarin Rock Nature Reserve is also identified on the Register of National Estate and is therefore and environmentally sensitive area. The percentage of the three main vegetation associations impacted; 131, 1023 and 1094 found within conservation reserves are 10.3%, 16.2% and 2.4% respectively. Additionally, 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
- Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05
- Dumbleyung Kukerin 1.4m Orthomosaic - DLI 02
- 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

Two of the roads under application lie within proximity of the Dumbleyung Catchment Area. The Catchment Area is approximately 2.3 kilometres from Mount Pleasant Road and 1.4 kilometres from Tincurrin Road.

The static groundwater level at Dualling Road ground water monitoring site is 16.95 metres below ground level, with a mapped groundwater salinity ranging from 14000 to greater than 35 000 micrograms 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. Additionally, a condition placed on the permit to undertake revegetation on completion of the works will minimise long term water quality issues associated with the

clearing.

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 raising no objection to the proposal.

There are two 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 are three Aboriginal Sites of Significance listed within the area under application; Dumbleyung, Merilup Soak and Tarin Rock sites.

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 | Decision | Comment / recommendation |
|----------------------------------|--|----------|---|
| Road construction or maintenance | Mechanical Removal 4 area (ha)/ trees | Grant | The assessable criteria have been addressed and no objections were raised. The assessment identified the proposal is likely to be at variance to some 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 | | Carwardine Rd |
| Road construction or maintenance | Mechanical Removal | | Moulyinning Rd |
| Road construction or maintenance | Mechanical Removal | | Moulyinning Rd Nth |
| Road construction or maintenance | Mechanical Removal | | Slant Rd |
| Road construction or maintenance | Mechanical Removal | | Harrison Rd |
| Road construction or maintenance | Mechanical Removal | | Springhurst Rd |
| Road construction or maintenance | Mechanical Removal | | Hills Rd |
| Road construction or maintenance | Mechanical Removal | | Tarin Rock Rd Nth |

