



1. Application details

1.1. Permit application details

Permit application No.: 1130/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Plantagenet

1.3. Property details

Property: Spencer Road SLK 4.02 – SLK 6.02

Local Government Area: Shire of Plantagenet

Colloquial name: Spencer Road Reserve

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|----------------------------------|
| 0.2 | | Cutting | 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 |
|---|---|---|---|
| <p>Beard Vegetation Association 3: Medium forest; jarrah-marri (Hopkins et al., 2001; Shepherd et al., 2001).</p> <p>Mattiske Consulting (1998) describes the vegetation as open forest of <i>Corymbia calophylla</i>-<i>Eucalyptus marginata</i> subsp. <i>marginata</i> on slopes, low forest of <i>Allocasuarina decussata</i> -<i>Banksia seminuda</i> on valley floor.</p> | <p>This proposal is to re-align a section of Spencer Road and widen and raise the bridge crossing over the Hay River. As such the vegetation covered is associated with a watercourse. The vegetation has been described as predominantly <i>Eucalyptus rudis</i> (flooded gum), <i>Eucalyptus cornata</i> (Yate), and <i>Melaleuca raphiophylla</i> (swamp paperbark) with the understorey species including <i>Lepidosperma</i> spp (sword grass), <i>Leucopogon verticillatus</i> and bracken fern (OPUS, 2005).</p> | <p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).</p> | <p>A site visit was not conducted as part of this assessment as sufficient information has been provided with the application. A number of weed species were identified in the area covered by this application (OPUS, 2005) and a report released in 1995 by the Waterways Commission classified the river bank vegetation in this area as being degraded with some weed invasion and erosion.</p> <p>Photographs provided (TRIM ref AI992) suggest that the canopy species is intact but the understorey and groundcover are primarily dominated by weed species.</p> |

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

The consultants reported that the vegetation covered by this application is infested with weeds and in a degraded condition (OPUS, 2005). This was confirmed by viewing photographs of the site. There is a large state forest within the local area, which is likely to contain a much higher level of biological diversity than exists in the area being assessed. As such, this application is not likely to be at variance to this Principle.

Methodology OPUS (2005), photographs (TRIM ref AI992)
GIS Databases:
-Mt Barker EMT + 12.5m 753+8 - DOLA 2/00
-CALM Managed Lands and Waters - CALM 1/07/05

(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

The vegetation covered by this application is associated with the Hay River. The consultants (OPUS) who carried out an Environmental Impact Assessment (EIA) for this site noted that while riverine environments are important ecological areas for many animal species, this site is presently heavily infested with weed species and the proposed clearing is small (less than 0.2ha). OPUS consulted local CALM officers who reported that no known threatened fauna populations exist in the proposed development site and that no disruptive impacts to fauna habitat are likely as a result of the development (OPUS, 2005).

The vegetation associated with the river does provide some linkage along the watercourse, the loss of linkage at the site in the short term will be remediated when the site is revegetated post construction.

As such, it is considered that this proposal is not likely to be at variance to this Principle.

Methodology OPUS (2005), confirmation of CALM advice (TRIM ref AI993)
GIS Databases:
-Hydrography, linear - DOE 1/2/04
-MT Barker EMT + 12.5m 753+8 - DOLA 02

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

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

No Declared Rare Flora (DRF) or Priority flora species are known to occur within the area under application (OPUS, 2005).

The nearest DRF species are:

-*Caladenia christineae*, found 6.6km south west, is a tuberous, perennial, herb with white, cream, yellow flowers and is found in sand, clayey loam, laterite. Margins of winter-wet flats, swamps, & freshwater lakes (FloraBase, 2006), and

-*Verticordia apecta*, found 5.7km south east, is a slender, erect shrub, with white, pink flowers and is found in sandy clay with loam & broken granite on slopes (FloraBase, 2006).

The nearest Priority species are:

-*Laxmannia jamesii* (P4), found 3.2km south, is a tufted, stilt-rooted perennial, herb with red, white flowers and found in grey sand. Winter-wet locations (FloraBase, 2006), and

-*Caladenia plicata* (P4), found approximately 80m west, is a tuberous, perennial, herb with green, yellow, flowers and found in sand, gravel (FloraBase, 2006).

This occurrence of *Caladenia plicata* is also listed on the interim Register of the National Estate. As it was on the interim list when the Australian Heritage Commission was abolished no further work will be conducted to complete its registration and as such has no additional special protection. Local CALM officers are not aware of any unusual significance this particular occurrence of *Caladenia plicata* has that would qualify it to be investigated for the Register.

It is considered that none the species listed above will be impacted upon by the proposed works and as such this proposal is not likely to be at variance to this Principle.

Methodology OPUS (2005), FloraBase (2006)
GIS Databases:
-Declared Rare and Priority Flora List - CALM 01/07/05
-Register of National Estate - EA 28/01/03

(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

The closest recorded Threatened Ecological Community (TEC) to the site is approximately 26km south west. No TEC's are known or registered in the project site (OPUS, 2005). Therefore, it is considered that the proposal is not likely to be at variance with this Clearing Principle.

Methodology OPUS (2005)
GIS Database:
-Threatened Ecological Communities - CALM 12/04/05

(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 is not at variance to this Principle

The State Government is committed to the National Objective and Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001) which includes a target that prevents clearance of ecological communities with an extent below 30%

of that pre-European settlement (Department of Natural Resources and Environment, 2002; EPA, 2000).

The area under application has above 30% representation for the IBRA Bioregion (Jarrah Forest), for the Shire (Plantagenet), for Beard Vegetation Association 3 (Shepherd et al., 2001; Hopkins et al., 2001) and Vegetation Complex Va2 (Mattiske Consulting, 1998).

Given the above information, it is considered that this application is not at variance to this Principle.

Methodology Hopkins et al. (2001), Shepherd et al. (2001), Mattiske Consulting (1998), AGPS (2001), EPA (2000), Department of Natural Resources and Environment (2002)

(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 vegetation covered by this application while within the road reserve is associated with a watercourse. Some of the vegetation within the area under application grows adjacent to the Hay River and would be inundated during high flows (photographs). Much of the vegetation is in a degraded condition and the area will be revegetation post bridge construction (OPUS, 2005). Given the condition of the vegetation, the small area to be cleared and the proposed rehabilitation, it is considered that this proposal is not likely to be at variance to this Principle.

Methodology OPUS (2005), photographs (TRIM ref AI992)
GIS Database:
-Hydrography, linear - DOE 1/2/04

(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

A Rivercare Officer from the Department has been on-site and has noted that the proposed changes in the culvert arrangement are likely to produce changes in the river for 30-50m downstream, which are not likely to be of more concern than the present situation. It was also noted that there is potential to improve stability of the area through better stabilisation of the crossing flanks.

Due to the elevation of the site above sea level, 60-65m, acidity is not considered to be an issue at this site.

Erosion at the site is likely to increase in the short term due to the removal of vegetation and excavation of the banks. However, post construction, stabilisation of the banks will occur by installing rock rip rap protection on the motar base and through revegetation (OPUS, 2005).

Given the above, it is considered that this proposal is not likely to be at variance to this Principle provided stabilisation and rehabilitation of the site takes place post construction.

Methodology Rivercare Officer notes (DoE TRIM ref AI990), OPUS (2005)
GIS Database:
-Topographic Contours, Statewide - DOLA 12/09/02

(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 is not likely to be at variance to this Principle

The nearest CALM managed conservation area is approximately 0.9km to the west and is the Mt Lindsay National Park. The proposed clearing is for a small area (0.2ha) and covers buffer vegetation along the Hay River. As this vegetation is quite degraded and the area will be revegetated after the works have been carried out, it is unlikely that the proposed clearing will impact upon this Reserve.

The benchmark of 15% representation in conservation reserves (JANIS, 1997) has been met for the Mattiske Vegetation Associations with 46.8% in reserve (Mattiske Consulting, 1998) but has not been met for Beard Vegetation Association 3 with 10.1% in reserve (Hopkins et al., 2001; Shepherd et al., 2001). As the area to be cleared is small (0.2ha) and will be revegetated after the works are completed this lower percentage in reserve is not considered to be of concern.

Methodology Hopkins et al. (2001), Shepherd et al. (2001), JANIS (1997), Mattiske Consulting (1998)
GIS Database:
-CALM Managed Lands and Water - CALM 1/07/05

(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 area under application is not within a Public Drinking Water Source Area (PDWSA). However, the vegetation to be cleared borders the Hay River and sedimentation of the watercourse may occur as a result of the proposed works.

The increased sedimentation and turbidity directly relating to the removal of the vegetation is likely to be minimal as stream flows will be diverted during construction.

To further reduce any impact of this proposal, the recommendations included in the EIA (OPUS, 2005) should be implemented during works.

Given the above, this project is not likely to be at variance with this Principle.

Methodology OPUS (2005)
GIS Databases:
-Hydrography, linear - DOE 1/2/04
-Public Drinking Water Source Areas (PDWSA's) - DOE 07/02/06

(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 at variance to this Principle

The proposed works involve clearing of up to 0.2ha of vegetation that is associated with the Hay River. Stabilisation of the river banks post works will be important to reduce erosion during high flows in the future. However, the proposed clearing in itself, is unlikely to impact upon peak flood height or duration. This is because it is a small area and rehabilitation of the site will take place once the work is complete.

Methodology

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

No objections have been raised for this proposed clearing activity. There are no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear.

Two registered aboriginal sites exist close to the proposed re-alignment area and as such a survey was conducted (OPUS, 2005). The outcome of the Aboriginal Survey report is that it advises that the project should proceed as long as the flow of the Hay River is maintained during the work and that no pollutants from machinery are allowed to enter the Hay River. Additionally, that the area should be fully rehabilitated with local native species when the work is complete. The Shire intend to maintain the flow of the river during construction, control pollutant runoff and revegetate the area (OPUS, 2005).

It is the CEO of the Department's view that the grant of a clearing permit in this case constitutes a secondary approval that removes the Environmental Protection Act's prohibition on the applicant exercising its statutory powers. Accordingly, the CEO is not required to comply with future act procedures under the Native Title Act 1993.

Methodology OPUS (2005), Aboriginal Survey (TRIM ref AI992)

4. Assessor's recommendations

| Purpose | Method | Applied area (ha)/ trees | Decision | Comment / recommendation |
|----------------------------------|---------|--------------------------|----------|--|
| Road construction or maintenance | Cutting | 0.2 | Grant | Assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit be granted with attached conditions requiring revegetation of the site once the works have been completed. |

5. References

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
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.
EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
FloraBase (2006) Descriptions by the Western Australian Herbarium, CALM. Text used with permission

- (<http://florabase.calm.wa.gov.au/help/copyright>). Accessed on Tuesday, 6 June 2006.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- OPUS (2005) Environmental Impact Assessment, Spencer Road -Hay River Crossing, prepared for the Shire of Plantagenet.
- 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.
- Waterways Commission (1995) The Condition of the Denmark and Hay River Foreshores. Report No. 60.

6. Glossary

| Term | Meaning |
|------|--|
| CALM | Department of Conservation and Land Management |
| DAWA | Department of Agriculture |
| DEP | Department of Environmental Protection (now DoE) |
| DoE | Department of Environment |
| DoIR | Department of Industry and Resources |
| DRF | Declared Rare Flora |
| EPP | Environmental Protection Policy |
| GIS | Geographical Information System |
| ha | Hectare (10,000 square metres) |
| TEC | Threatened Ecological Community |
| WRC | Water and Rivers Commission (now DoE) |