



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 2945/3
File Number: DEC9989
Duration of Permit: From 1 March 2009 to 1 March 2012

PERMIT HOLDER

Bunbury Cathedral Grammar School Inc.

LAND ON WHICH CLEARING IS TO BE DONE

LOT 73 ON PLAN 32355

AUTHORISED ACTIVITY

Clearing of up to 3.2 hectares of native vegetation within the area cross-hatched yellow on attached Plan 2945/3.

CONDITIONS

1. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared for the purpose of a sporting ground and access road 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) shall avoid the movement of soils in wet conditions;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Fauna Management

- (a) Prior to clearing within the areas described in Authorised Activity above, the areas shall be inspected by a *fauna specialist* who shall identify the presence of *Pseudocheirus occidentalis* (Western Ringtailed Possum), *Calyptorhynchus baudinii* (Baudin's Black Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Black Cockatoo) and *Calyptorhynchus banksii naso* (Red-tailed Black Cockatoo).
- (b) Prior to clearing the permit holder shall ensure that any fauna identified in condition 3 (a) shall be removed and relocated by a *fauna clearing person*, in accordance with a licence issued by the Department of Environment and Conservation.

4. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to fauna management pursuant to condition 3 of this Permit:

- (a) the location of each *habitat/habitat tree* identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
- (b) the species of fauna reasonably likely to utilise, or that have been observed utilising, the habitat/habitat tree(s); and
- (c) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings.

5. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 4 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 1 December 2011, the Permit Holder must provide to the CEO a written report of records required under condition 4 of this Permit where these records have not already been provided under condition 5(a) of this Permit.

Definitions

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

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

fauna clearing person means a person who has obtained a licence from the Department, issued pursuant to the *Wildlife Conservation Regulations 1970* authorising them to take fauna;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

fill means material used to increase the ground level, or fill a hollow;

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

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;

term means the duration of this Permit, including as amended or renewed;

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

20 January 2011

Plan 2945/3



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre
- Bunbury 50cm Orthomosaic - Landgate 2008



0 75 m

Scale 1:2992

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

K. Faulkner

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 2945/3
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Bunbury Cathedral Grammar School Inc

1.3. Property details

Property: LOT 73 ON PLAN 32355 (House No. 115 BUSSELL GELORUP 6230)
Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.2		Mechanical Removal	Recreation

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 20 January 2011

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
Beard Vegetation Association 6 - Medium woodland: tuart & jarrah (Hopkins et al., 2001, Shepherd, 2007).	The proposal is to clear 3.2ha of disturbed regenerating forest.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Observed during site visit (DEC, 2006): Approximately a third of the area is semi-cleared in degraded condition - the other areas were in good to very good (Keighery, 1994) condition with several mature marri-jarrah habitat trees observed.
Hedde Vegetation Complex - Karrakatta Complex-Central and South; open-forest of tuart-jarrah-marri including B. attenuata, B. grandis, C. fraserana & A. flexuosa (Hedde et al. 1980).	The vegetation under application is an Open forest of mixed tuart-jarrah-marri, including Xylomelum occidentale, Zamia spp., Hardenbergia comptoniana, Hibbertia spp., and several shrub species. Other noted species include wildflowers eg. Caladenia flava (DEC Site Visit, 2006).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	

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 purpose of this amendment is to alter the clearing footprint required for the construction of a sporting oval and extend the duration of the permit by 12 months. No increase to the amount of clearing is required and the area of native vegetation to be cleared remains at 3.2 hectares. The applicant has advised that less than 3.2 hectares is likely to be cleared.

The vegetation under application is considered to be in mostly good to very good (Keighery 1994, DEC, 2006) condition with the south east areas considered being in a degraded (Keighery, 1994; DEC, 2006) condition and approximately a third of the area consists of existing cleared vegetation and access tracks (DEC, 2006).

The vegetation under application is comprised of Beard Vegetation Unit 6 and Hedde vegetation complex Central and south, both of which are above the 10% 'threshold level' for constrained areas recognised by the EPA (2000).

All areas under application display some level of disturbance (logging and weed invasion), however the area is within a highly cleared landscape, approximately 25% native vegetation retained, within the local area (10km radius). The applied area is surrounded by residential properties, some containing remnant vegetation.

There are 7 priority flora species recorded within the local area on the same soil and vegetation as the applied area. Past disturbance and weed invasion within the area under application reduce the likelihood of these conservation significant flora species occurring within the applied area however they may be occurring in areas of very good (Keighery, 1994) condition within the area under application.

There is a high likelihood that several threatened and priority fauna species known to occur in the local area utilise the vegetation under application. A nearby System 6 Conservation Area is approximately 1km from the proposed clearing, increasing the likelihood that these species occur within the vegetation under application.

Given the above the clearing as proposed may be at variance to this principle.

Conditions have been placed on the permit to mitigate the potential loss of biodiversity including reduce and avoid clearing as practicable and weed and dieback management conditions.

Methodology

References:

DEC (2006)
EPA (2000)
Keighery (1994)

GIS Database:

CALM Managed Lands and Waters - CALM 01/06/05
SAC Bio datasets - accessed 23 January 2009
Hedde Vegetation Complexes - DEP 22/06/95
Pre European Vegetation - DA 01/01
Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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

The native vegetation under application is within an area which has been highly cleared (approximately 25% native vegetation retained in a 10km radius), therefore remnant vegetation is significant as corridor vegetation with larger remnants being more significant as habitat.

The applied area is surrounded by residential properties, some containing remnant vegetation, as well as a System 6 conservation area located approximately 700m west. Given the level of protection of the vegetation within the System 6 area this vegetation is of greater significance than the vegetation under application.

There are a number of conservation significant fauna records in close proximity to the applied area, namely the Quenda, Western Ringtail Possum, Western Brush Wallaby, Forest Red tailed Black Cockatoo, Carnaby's Cockatoo and Baudin's Cockatoo. The Forest Red tailed Black Cockatoo and the Western Ringtail possum likely utilise the applied area as habitat or as a transport corridor (DEC, 2006).

Given that there are areas of remnant vegetation nearby with some level of protection over them and taking into account that the vegetation under application is a remnant of vegetation in the local area which is likely to provide habitat for fauna indigenous to Western Australia, the clearing as proposed may be at variance to this principle.

To mitigate the potential loss of the Western Ringtail Possums and Red tailed Black Cockatoos conditions have been imposed to identify and relocate prior to clearing.

Methodology

References:

DEC (2006)

GIS Database:

CALM Managed Lands and Waters - CALM 01/06/05
SAC Bio datasets - accessed 23 January 2009
Pre European Vegetation - DA 01/01

(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

There are two known records of rare flora occurring within 10km of the applied area, namely *Diuris drummondii* and *Caladenia huegelii*.

Past disturbance and weed invasion within the area under application (DEC, 2006) reduce the likelihood of these conservation significant flora species occurring within the applied area and given that the area under application is not optimal habitat for either rare flora species (WA Herbarium, 1998 -) occurring within the local area the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
 DEC (2006)
 WA Herbarium (1998 -)

 GIS Database:
 Pre European Vegetation - DA 01/01
 SAC Biodatasets - accessed 29 January 2009
 Soils, Statewide DA 11/99

(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**
 Twenty occurrences of seven Threatened Ecological Communities (TECs) occur within the local area (10km radius).

The closest occurrence is located 3km north-east from the applied area and the vegetation under application is not expected to be comprised whole or part of any TEC nor is the applied area considered necessary for the maintenance of any TEC.

Given the above the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
 SAC Biodatasets - accessed 29 January 2009

(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 likely to be at variance to this Principle**
 The application is located on the Swan Coastal Plain Bioregion within the Shire of Capel. The extent of native vegetation in these areas is 39.16% and 34.46% respectively (Shepherd, 2009). There is approximately 25% of native vegetation remaining in the local area as much of the surrounding area has been cleared for agriculture, industry or residential development.

The vegetation proposed to be cleared is part of the Beard vegetation association 6, with approximately 25.88% of this association remaining (Shepherd, 2009). The applied area is also mapped as Heddle Vegetation Complex Karrakatta Complex Central and South which has approximately 29.5% of this complex remaining (Heddle et al. 1980).

The condition of the vegetation under application is considered to vary between good and very good (Keighery, 1994) with the south east areas considered to be in a degraded (Keighery, 1994) condition (DEC, 2006).

As the local area is not considered to have been extensively cleared (below the EPA (2000) recommended threshold level for constrained areas) the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
 DEC (2006)
 EPA (2000)
 Heddle et al. 1980)
 Keighery (1994)
 Shepherd (2009)

 GIS Database:
 Heddle Vegetation Complexes - DEP 22/06/95
 Interim Biogeographic Regionalisation of Australia - EA 18/10/00
 Local Government Authorities - DLI 8/07/04
 Pre European Vegetation - DA 01/01
 SAC Biodatasets - accessed 29 January 2009
 NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 area under application does not include any wetlands or watercourses. The closest wetland and/or watercourse is a perennial swamp approximately 200m south west of the applied area.

A small, intermittent, man-made diversion drain is located approximately 400m east of the proposed clearing and several large damplands are situated 500m east and 600m north-west of the area under application. Several multiple use wetlands surround the area, the closest being 1km south of the proposed area.

Given the above the vegetation under application is not likely to be growing in, or in association with, a wetland or watercourse and the proposal is therefore not likely to be at variance to this principle.

Methodology GIS Database:

ANCA wetlands - Environment Australia 26/3/99
EPP Lakes Policy Area - DEP 14/05/97
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain DEC 11/04/07
Hydrography linear - DOW 13/7/06
Ramsar wetlands - DEC 03
South Coast Significant Wetlands WRC 10/06/2003

(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 proposed use of the applied area, sporting oval and access road, means the area under application will be mostly grassed after clearing has occurred.

Given the above any land degradation that may occur is likely to be short term and therefore not likely to be appreciable.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:

Hydrogeology, Statewide 05 Feb 2002
Hydrography, linear - DOW 13/7/06
Salinity Risk LM 25m - DOLA 00
Soils, Statewide DA 11/99
Topographic contours statewide - DOLA and ARMY 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 may be at variance to this Principle

A large System 6 Conservation Area is located approximately 700m west of, and appears to contribute to an ecological linkage which includes the area under application, although a major highway splits the two areas.

It is not expected that this proposal will have significant long-term impacts on the conservation area, however, due to the lack of surrounding vegetation to the east linking the conservation area to the north-east, and the density of surrounding residential development, the area under application may provide an important ecological linkage to the conservation area, thus the proposal may be at variance with this principle.

Methodology GIS Database:

Cadastre - Landgate Dec 07
CALM Managed Lands and Waters - CALM 01/06/05
Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
System 1 to 5 and 7 to 12 areas ? DEC 11/7/06

(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 does not include any wetlands or watercourses. The closest wetland and/or watercourse is a perennial swamp approximately 200m south west of the applied area.

A drain exists 300m from the proposed clearing however the area between the proposed sporting grounds and the drain is fully vegetated and vegetation is expected to filter any runoff from the proposed ovals.

Given the above the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
Groundwater Salinity Statewide DoW 13/07/06
Hydrographic catchments, catchments - DoW 01/06/07
Hydrography, linear - DOW 13/7/06
Salinity Risk LM 25m - DOLA 00
Topographic Contours, Statewide - DOLA 12/09/02

(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 of the proposed clearing, flooding impacts are unlikely to occur. Therefore, the proposal is not likely to be at variance with this principle.

Methodology GIS Database:
Hydrographic catchments, catchments - DoW 01/06/07
Hydrography, linear - DOW 13/7/06
Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The area is part of the Bunbury Groundwater area (Stratham-Gelorup sub-area), proclaimed under the RIWI Act. The aquifer is Perth-Yarragadee South and is fully allocated (C4) (DoW 2006a).

The area falls within a priority 3 Public Drinking Water Source Area (PDWSA) within the Five Mile Brook Catchment.

GWL102351(4) was reissued for a period of 9 years and the Department of Water has determined that the water usage of the facility is adequate. A water licence has been issued by the Department of Water (DoW) to include the requirements of the proposed sporting facility (DoW 2006b).

Clearing for this development is included in the applicant's long-term plan, which is encompassed in the Town Planning Scheme Zoning. Development approval is therefore endorsed by Council (Shire of Capel 1998). The land is zoned for Educational purposes and the proposal is considered essential for the school's educational curricular and co-curricular programmes.

The application area was previously covered by clearing Permit CPS 1229/2. This Permit expired prior to clearing being carried out. Due to this expired Permit an application to clear was again submitted and granted (CPS 2945/1).

The previously granted permit (CPS 2945/2) was created as a result of an appeal and subsequent Ministerial determination on Clearing Permit CPS 2945/1. As a result condition 3(a) was amended to include threatened fauna Carnaby's Black Cockatoo and Baudin's Black Cockatoo.

A submission was received (Submission, 2011) which outlined the following concerns:

- recent EPBC approval only allows for the clearing of 2.3ha and supporting consultants report only states that 2.3ha is to be revegetated
- does the area require additional surveying by a licensed surveyor?
- the vegetation to be cleared is an outstanding example of mature trees with mostly intact understorey and is the best remaining vegetation in the local area
- The remaining vegetation within the local area is degraded and it is unlikely that the DEC figure of 19275ha of vegetation remains in the Shire of Capel, and if it does its value is greatly diminished
- does not support the EPBC decision to use a degraded piece of land with no habitat for possums or Cockatoos as an offset site.

The above concerns have been addressed within the assessment report where appropriate and management and mitigation measures have been imposed. In addition, DEC data (Shepherd, 2009) shows that the amount of remaining pre-European vegetation within the Shire of Capel is ~19, 275ha. DEC does not have the condition mapping for all vegetation remaining within local area or Shire of Capel. A condition rating has been given to the applied area based on DEC conducted site inspection (DEC, 2006). As the area of clearing has not increased from the previously granted permit (CPS 2945/2) and the mapped vegetation types for the applied area remain the same, DEC is not of the opinion that further surveying is required. The area under application has also been assessed and approved with conditions under the EPBC Act 1999 by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC). This is a separate approvals process to those administered under the EP Act. DSEWPC have approved the proposed clearing subject to offset conditions (EPBC 2007/333) (DEC Ref: A362643).

The DSEWPC approved (controlled action) area of 2.3ha excludes 0.78ha of existing cleared vegetation and access tracks from within the approved clearing envelope. The controlled action area of (2.3ha) was determined

by DSEWCP..DEC has considered all native vegetation within the applied area including that within and outside of the approved controlled action area as defined by DSEWCP.

Methodology

References:

DoW (2006a)

DoW (2006b)

Submission (2011)

GIS Database:

Cadastre - Landgate Dec 07

RIWI Act, Groundwater Areas - DoW 13/07/06

Town Planning Scheme Zones - MFP 31/08/98

Public Drinking Water Source Areas (PDWSAs) ? 07/02/06

4. References

DEC (2006a) CPS 1229/1 Site Inspection Report, Department of Environment and Conservation, 9 October 2006, DOC6755.

DEC (2006b) Threatened Ecological Community Advice, Biodiversity Co0rdination Section, Department of Environment and Conservation, DOC8332

DoW (2006a) Water Resources Licensing System, Aquifer Allocation Report, ran on 02/11/06

DoW (2006b) Extension of water allocation licence for Bunbury Grammar School, Department of Water, Bunbury.

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, Western Australia.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

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. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)