



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3629/1
Permit Holder:	Western Australian Planning Commission
Duration of Permit:	15 May 2010 to 15 May 2015

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of fuel load reduction.

2. Land on which clearing is to be done

LOT 201 ON PLAN 12942 (GOSNELLS 6110)

LOT 151 ON PLAN 11260 (GOSNELLS 6110)

3. Authorised activity

The Permit Holder shall not clear more than 1.5 hectares of native vegetation within the areas hatched yellow on attached Plan 3629/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation authorised under this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

6. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

7. 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*:
 - clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

- (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the *term* of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

8. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, 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 date that the area was cleared; and
- (c) the size of the area cleared (in hectares).

9. 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 8 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 15 February 2015, the Permit Holder must provide to the CEO a written report of records required under condition 8 of this Permit where these records have not already been provided under condition 9(a) of this Permit.

Definitions

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

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

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;

weeds 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*.

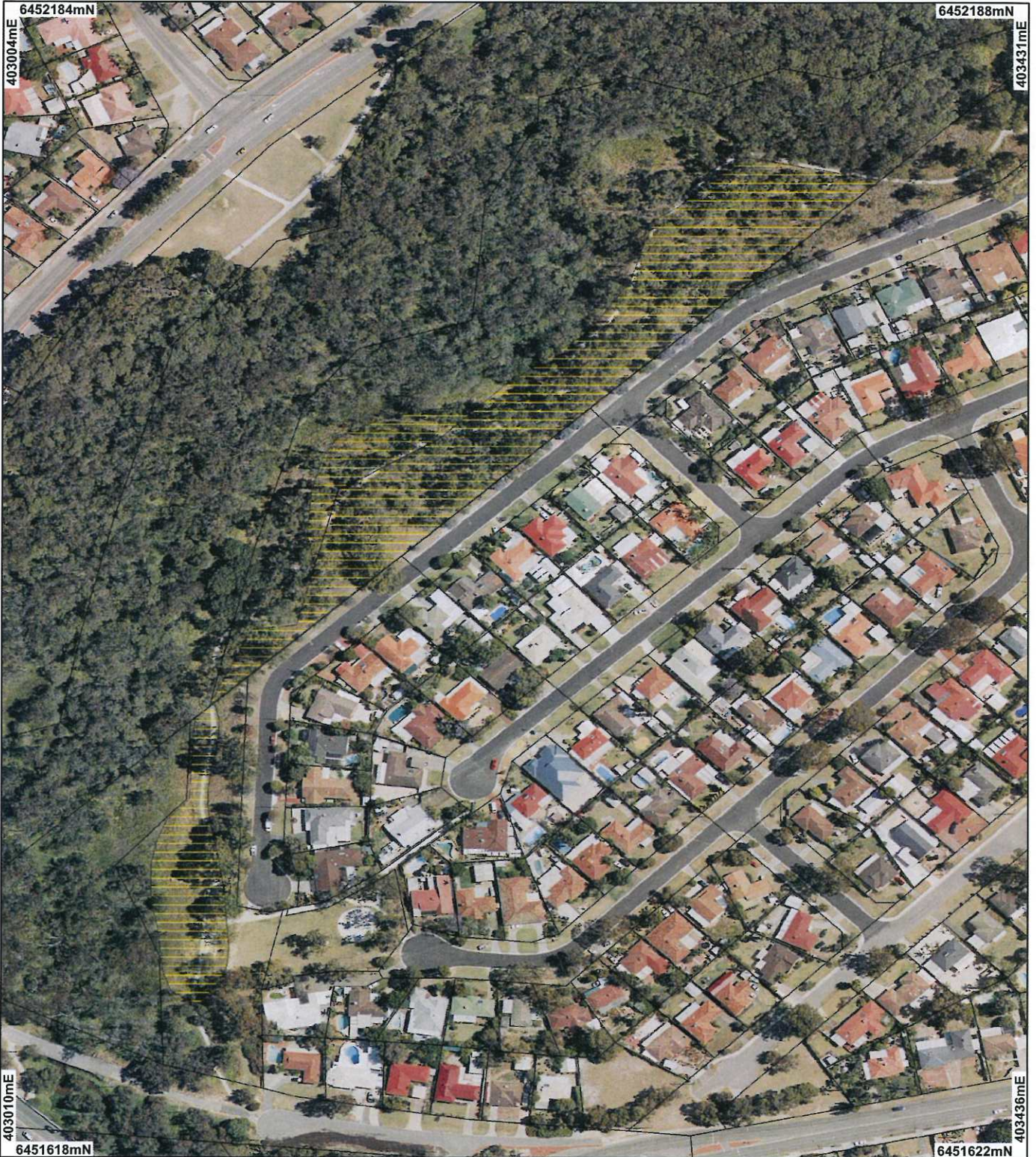


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

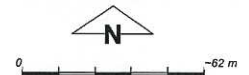
15 April 2010

Plan 3629/1



LEGEND

-  Cadastre
 -  Clearing Instruments
 -  Areas Applied to Clear
 -  Areas Approved to Clear
- Swan Coastal Plain Central
20cm Orthomosaic - Landgate
2000



Scale 1:2500

(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 Date 15/6/10

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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* Project Data. This data has not been quality assured. Please contact map author for details.



1. Application details

1.1. Permit application details

Permit application No.: 3629/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Western Australian Planning Commission

1.3. Property details

Property: LOT 201 ON PLAN 12942 (GOSNELLS 6110)
LOT 151 ON PLAN 11260 (GOSNELLS 6110)
Local Government Area: CITY OF GOSNELLS
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.5		Burning	Hazard reduction or fire control

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

J.S. Beard (1980) mapped the vegetation within the area under application as Bassendean 1001: medium very sparse woodland; Eucalyptus marginata (Jarrah), with low woodland; Banksia species and Casuarina (or Allocasuarina) species.

E.M. Heddle (1980) mapped the vegetation within the area under application as Southern River Complex 42: open woodland of Corymbia calophylla (Marri) - Eucalyptus marginata (Jarrah) - Banksia species with fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca raphiophylla (Swamp Paperbark) along creek beds.

Clearing Description

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application comprises primarily open Corymbia calophylla (Marri) woodland.

Vegetation Condition

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)

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

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)

Comment

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application ranges from 'completely degraded' through to 'good' condition.

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

This amended application is for the clearing of approximately 1.5 hectares of native vegetation by burning for fuel load reduction. The area under application is located predominantly on the south east side of a walk trail, with some areas on the north west side of the walk trail.

The WAHerb and DeFl databases indicate approximately 20 records of rare flora and 30 records of priority flora within a five kilometre radius of the area under application. The nearest of these are Byblis gigantea (priority 3), Tetratheca sp. Granite (priority 3) and Acacia ocnophylla subsp. patulifolia (priority 3) recorded approximately 600 metres north west of the area under application.

Aerial photography indicates that the landscape has approximately 20% vegetative cover within a five kilometre radius of the area under application.

The area under application is located within Bush Forever site 246. Aerial photography indicates that the area under application forms part of a riparian corridor within an area of urban development.

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application comprises primarily open Corymbia calophylla (Marri) woodland ranging from 'completely degraded' through to 'good' condition. The site inspection identified that numerous fauna species utilise the area under application as habitat, and as a corridor for moving through the landscape.

The proposal is to clear a total of 1.5 hectares of native vegetation by burning, which in the short-term may impact on biodiversity values. However with appropriate management (for example weed control) the native vegetation is expected to recover to its current condition.

This proposal is not likely to be at variance with this principle.

Methodology DEC 2010
GIS datasets:
- Swan Coastal Plain North 20cm Orthomosaic - Landgate 2009
- Bush Forever 2000 - Site Boundaries - DPI 2000
SAC biodatasets:
- WAHerb - DEC 2008
- DeFI - DEC 2008
- Fauna - DEC 2009

(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

Aerial photography indicates that the area under application forms part of a riparian corridor within an area of urban development.

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application comprises primarily open *Corymbia calophylla* (Marri) woodland ranging from 'completely degraded' through to 'good' condition. During the site inspection *Isoodon obesulus fusciventer* (Quenda, priority 5), *Notechis scutatus* (Tiger Snake) and several bird species were observed.

There are approximately 30 recorded occurrences of fauna of conservation significance within a five kilometre radius of the area under application. The nearest is a museum record for *Acanthopis antarcticus* (Southern Death Adder, priority 3) approximately 630 metres west of the area under application. In 2004 *Isoodon obesulus fusciventer* (Quenda, priority 5) was recorded approximately 1.4 kilometres south east of the area under application. In 2008 *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo, threatened) was recorded approximately 2.6 kilometres south east and 2.7 kilometres north west of the area under application.

The proposal is to clear a total of 1.5 hectares of native vegetation by burning, which in the short-term may impact on fauna habitat. However with appropriate management (for example weed control) the native vegetation is expected to recover to its current condition.

This proposal may be at variance with this principle.

Methodology DEC 2010
GIS datasets:
- Swan Coastal Plain North 20cm Orthomosaic - Landgate 2009
- Bush Forever 2000 - Site Boundaries - DPI 2000
SAC biodatasets:
- Fauna - DEC 2009

(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

The WAHerb and DeFI databases indicate approximately 20 records of rare flora within a five kilometre radius of the area under application. The nearest of these are *Banksia mimica* (Summer Honeypot) recorded approximately 2.2 kilometres east of the area under application, *Eleocharis keigheryi* and *Thelymitra stellata* (Star Sun Orchid) recorded approximately 2.8 kilometres south east, and *Caladenia huegelii* (Grand Spider Orchid) recorded approximately 2.9 kilometres south west.

Banksia mimica grows in white or grey sand over laterite and sandy loam, *Eleocharis keigheryi* grows in freshwater creeks and claypans, *Thelymitra stellata* grows in sand, gravel and lateritic loam, and *Caladenia huegelii* grows in grey or brown sand and clay loam (WA Herbarium 1998+).

The area under application is mapped as having soils of hard acidic red soils and associated neutral red and yellow earths (Northcote et al 1960-8).

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application comprises primarily open *Corymbia calophylla* (Marri) woodland ranging from 'completely degraded' through to 'good' condition.

It is unlikely that *Banksia mimica*, *Eleocharis keigheryi*, *Thelymitra stellata* or *Caladenia huegelii* occur within the area under application because of different habitat requirements. Given the uniformity of the native vegetation and soils across the local area, and the condition of the native vegetation within the area under

application, it is unlikely that the area under application includes rare flora.

This proposal is not likely to be at variance with this principle.

Methodology DEC 2010
Northcote et al 1960-8
WA Herbarium (1998+)
GIS datasets:
- Swan Coastal Plain North 20cm Orthomosaic - Landgate 2009
SAC biodatasets:
- WAHerb - DEC 2008
- DeFI - DEC 2008

(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 six remnants of native vegetation containing threatened ecological communities (TECs) within a five kilometre radius of the area under application. The nearest surveyed sites are for TEC SCP08 (vulnerable) located approximately 3.2 kilometres north of the area under application within Bush Forever site 387 and TEC SCP3a (critically endangered) located approximately 3.4 kilometres north within Bush Forever site 422.

TEC SCP08 is described as herb rich shrublands in claypans, and TEC SCP3a is described as Eucalyptus calophylla - Kingia australis woodlands on heavy soils of the eastern side of the Swan Coastal Plain.

The area under application is mapped as having soils of hard acidic red soils and associated neutral red and yellow earths (Northcote et al 1960-8).

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application comprises primarily open Corymbia calophylla (Marri) woodland ranging from 'completely degraded' through to 'good' condition.

Given the condition of the native vegetation within the area under application, it is unlikely that the area under application comprises a threatened ecological community, or is necessary for the maintenance of one.

This proposal is not likely to be at variance with this principle.

Methodology DEC 2010
Northcote et al 1960-8
GIS datasets:
- Bush Forever 2000 - Site Boundaries - DPI 2000
SAC biodatasets:
- TEC-PEC sites - DEC 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 may be at variance to this Principle

Aerial photography indicates that the landscape has approximately 20% vegetative cover within a five kilometre radius of the area under application.

Aerial photography indicates that the area under application forms part of a riparian corridor, and is located within an area of urban development.

The National Objective and Targets for Biodiversity Conservation 2001-2005 (AGPS 2001) recommends a 30% threshold level for vegetation types, below which species loss appears to accelerate exponentially at an ecosystem level.

The Environmental Protection Authority's (EPA's) Position Statement No.9 Environmental Offsets identifies vegetation types with less than 30% of the pre-clearing extents remaining in the bioregion, or less than 10% of the pre-clearing extents remaining within a constrained area (in this case the Metropolitan Region Scheme), to be 'critical assets' that should be retained in situ. DEC supports the EPA's position on this matter.

J.S. Beard (1980) mapped the vegetation within the area under application as Bassendean 1001. This vegetation association is described as medium very sparse woodland; Eucalyptus marginata (Jarrah), with low woodland; Banksia species and Casuarina (or Allocasuarina) species. In 2007 this vegetation association had approximately 25.34% of its pre-clearing extent remaining within the Swan Coastal Plain bioregion, with approximately 5.13% of its pre-clearing extent in conservation tenure.

E.M. Heddle (1980) mapped the vegetation within the area under application as Southern River Complex 42. This vegetation complex is described as open woodland of Corymbia calophylla (Marri) - Eucalyptus marginata (Jarrah) - Banksia species with fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca raphiophylla

(Swamp Paperbark) along creek beds. In 1998 this vegetation association had approximately 19.8% of its pre-clearing extent remaining within the Swan Coastal Plain bioregion and approximately 17.2% of its pre-clearing extent remaining within the Perth Metropolitan Region Scheme constrained area, and is likely to have considerably less pre-clearing extent remaining in 2010.

In the context of its size, 1.5 hectares within a larger area of native vegetation is unlikely to comprise a significant remnant of native vegetation. However the native vegetation under application provides a buffer between adjacent native vegetation and edge effects resulting from adjacent urban development, and is part of an ecological linkage with nearby bushland (and within a Bush Forever site). Therefore it is considered that the native vegetation under application may be considered significant as a remnant.

This proposal may be at variance with this principle.

Methodology AGPS 2001
EPA 2006
GIS datasets:
- Swan Coastal Plain North 20cm Orthomosaic - Landgate 2009
- IBRA WA (Regions - Sub Regions) - DEH 2004
- Pre-European Vegetation - Beard 1980
- Heddl Vegetation Complexes - DEP 1995

(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 may be at variance to this Principle

The area under application is in close proximity to wetlands.

J.S. Beard (1980) and E.M. Heddl (1980) describe the mapped vegetation as primarily *Eucalyptus marginata* (Jarrah) and *Banksia* species woodland, with E.M. Heddl (1980) also describing *Eucalyptus rudis* (Flooded Gum) - *Melaleuca raphiophylla* (Swamp Paperbark) fringing woodland.

Two conservation category wetlands being the Canning River Floodplain and the Canning River are located approximately 260 metres north east and 280 metres north of the area under application respectively. A multiple use wetland being the Southern River is located adjacent the area under application.

Two ANCA wetlands being the Brixton Street Swamps and the Gibbs Road Swamp System and located approximately 3.2 kilometres north and approximately 4.6 kilometres south of the area under application respectively.

A site inspection undertaken by DEC in March 2010 determined that the native vegetation within the area under application comprises primarily open *Corymbia calophylla* (Marri) woodland ranging from 'completely degraded' through to 'good' condition. On the western side of the area under application are a few saplings of what appear to be *Eucalyptus rudis* (Flooded Gum). Riparian species occur in adjacent native vegetation west of the area under application.

Although an introduced species and not native vegetation, *Watsonia meriana* var. *bulbillifera* (*Watsonia*) occurs within the area under application (DEC 2010) and is associated with winter wet areas, riverbanks and creeklines (WA Herbarium 1998+). The presence of this species suggests that the proposed clearing may impact on native vegetation growing in association with a watercourse.

This proposal may be at variance with this principle.

Methodology DEC 2010
WA Herbarium (1998+)
GIS datasets:
- ANCA, Wetlands - EA 1999
- Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC 2008
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 2008
- Hydrography, linear - DOW 2006
- Pre-European Vegetation - Beard 1980
- Heddl Vegetation Complexes - DEP 1995

(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 landform of the area under application is low and relatively flat, and approximately 5-10 metres above sea level.

The soils within the area under application are mapped as type Ph2, described as river levees and terraces with chief soils of hard acidic red soils on the levees and associated neutral red and yellow earths (Northcote et al 1960-8).

Groundwater salinity within the area under application is mapped as 500-1000mg/L, and salinity mapping indicates that the area under application has a degree of salinity present.

The area under application is mapped as having high to moderate risk of acid sulphate soils.

It is unlikely that the clearing of native vegetation by burning will result in a significant land degradation risk as soil disturbance is likely to be minimal.

This proposal is not likely to be at variance with this principle.

Methodology Northcote et al 1960-8
GIS datasets:
- Topographic Contours, Statewide - DOLA 2002
- Soils, Statewide - AGWA 1999
- Salinity Risk LM 25m - DOLA 00
- Salinity Mapping LM 25m - DOLA 00
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC 2007
- Groundwater Salinity, Statewide - DOW 2000

(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 area under application is located within Bush Forever site 246.

There are two DEC-managed nature reserves within a five kilometre radius of the area under application. An un-named nature reserve is located approximately 2.6 kilometres south west of the area under application, and Kenwick Wetlands Nature Reserve is located approximately 3.2 kilometres north.

A Land for Wildlife site managed for conservation is located approximately 1 kilometre from the area under application.

Given that the area under application is located within a Bush Forever site, the proposed clearing may impact on the environmental values of this area through the increased potential for the intrusion of weed species.

This proposal may be at variance with this principle.

Methodology GIS datasets:
- Bush Forever 2000 - Site Boundaries - DPI 2000
- Swan Coastal Plain North 20cm Orthomosaic - Landgate 2009
- CALM Managed Lands and Waters - CALM 2005
SAC biodatasets:
- Land for Wildlife - DEC 2008

(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 landform of the area under application is low and relatively flat, with hard soils (Northcote et al 1960-8).

Groundwater salinity within the area under application is mapped as 500-1000mg/L, and salinity mapping indicates that the area under application has a degree of salinity present.

The area under application occurs within the Perth groundwater area and adjacent the Wungong Brook and Southern River area listed under the Rights in Water and Irrigation Act 1914.

The area under application is located adjacent to a multiple use palusplain, being the Southern River.

The area under application is mapped as having a high to moderate risk of acid sulphate soils, and a degree of salinity.

The proposed clearing by burning of approximately 1.5 hectares is not expected to cause significant or permanent deterioration in the quality of surface or underground water.

This proposal is not likely to be at variance with this principle.

Methodology Northcote et al 1960-8
GIS datasets:
- RIWI Act, Groundwater Areas - DOW 2006
- Hydrography, linear - DOW 2006
- Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC 2008

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 2008
- Topographic Contours, Statewide - DOLA 2002
- Salinity Risk LM 25m - DOLA 00
- Salinity Mapping LM 25m - DOLA 00
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC 2007
- Groundwater Salinity, Statewide - DOW 2000

(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

The landform of the area under application has a high point of approximately 11 metres above sea level along the south eastern edge dropping to approximately 4 metres above sea level along the north western edge adjacent the Southern River, with hard soils (Northcote et al 1960-8).

The area under application has an average annual rainfall of 900 millimetres and an average annual evapotranspiration of 800 millimetres, resulting in an average annual recharge of 100 millimetres.

The proposed clearing by burning of approximately 1.5 hectares is not expected to cause or exacerbate flooding.

This proposal is not likely to be at variance with this principle.

Methodology Northcote et al 1960

GIS datasets:

- Soils, Statewide - AGWA 1999
- Topographic Contours, Statewide - DOLA 2002
- Rainfall, Mean Annual - BOM 2001
- Evapotranspiration, Areal Actual - BOM 2001

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

Comments

The application was originally for 0.75 hectares of clearing by burning on Lot 201 on Plan 12942, and was amended to 1.5 hectares on Lot 201 on Plan 12942 and Lot 151 on Plan 11260.

A submission received from a community group expressed concern that the burning of the area under application will impact biodiversity and fauna habitat, result in soil erosion, and affect an unofficial pet cemetery.

The applicant advised that the proposed clearing is to be conducted in autumn (April / May).

DEC advises the following:

- that consideration be given to conducting a burn in a riverine environment in spring (suggest October / November) to deliver a controlled slow burn and attain the best environmental outcome, as a riverine environment is likely to have a higher soil / litter moisture content in spring compared with autumn and thereby a reduced risk of unplanned fire outside of the fuel reduction area; and
- that the fuel load within the area under application comprising of *Watsonia* and introduced grasses could be managed in the absence of fire through slashing and herbicide application.

The applicant should consult with the relevant local government in relation to any burning notification requirements.

The growth of some introduced species present within the area under application (such as Veldt Grass and African Lovegrass) may be stimulated by burning. Slashing and herbicide application may assist in restricting the spread of these species.

The land is owned in freehold by the Western Australian Planning Commission. As such native title notification is not necessary. There are no native title claims over the land. However the area under application is an Aboriginal site of significance (water source, camp, hunting place, natural feature, meeting place and plant resource), and the applicant should consult with the Department of Indigenous Affairs with regard to any requirements in relation to this matter.

Methodology GIS datasets:

- Aboriginal Sites of Significance - DIA 2010

4. Assessor's recommendations

Comment / recommendation

Assessment of this application has determined that the clearing proposed 'may be at variance' with clearing principles b, e, f and h; and is 'not likely to be at variance' with clearing principles a, c, d, g, i and j.

5. Reference

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- Department of Environment and Conservation (2010) Site Inspection Report for CPS 3629/1, Lot 201 on Plan 12942, Spencer Road in Thornlie. Site inspection undertaken on 30 March 2010. Department of Environment and Conservation, Western Australia (unpublished). TRIM ref. DOC124953.
- EPA (2006) Environmental protection of native vegetation in Western Australia. Environmental Offsets. Position Statement No. 9. January 2006. Environmental Protection Authority, Western Australia.
- Gibson N., Keighery B., Keighery G., Burbidge A. and Lyons M. (1994) A Floristic Survey of the Southern Swan Coastal Plain. Western Australian Department of Conservation and Land Management and the Western Australian Conservation Council.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Schoknecht N. (2002) Soil Groups of Western Australia. A simple guide to the main soils of Western Australia. Resource Management Technical Report 246. Edition 3
- Shepherd, D.P. (2007) 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.
- Western Australian Herbarium (1998-current) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (accessed March 2010).

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)