



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3890 / 1
File Number: 2010/005949-1
Duration of Permit: From 14 March 2011 to 14 March 2016

PERMIT HOLDER

Shire of Busselton

LAND ON WHICH CLEARING IS TO BE DONE

LOT 4200 ON PLAN 208196 (House No. 37 GIBB KALOORUP 6280)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 13 hectares of native vegetation within the areas hatched yellow on attached Plan 3890/1.

CONDITIONS

1. Vegetation management

The Permit Holder shall not clear native vegetation within 30 metres of the *riparian vegetation* of any *watercourse* or *wetland* within and/or adjacent to the area cross-hatched yellow on Plan 3890/1.

2. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil
- (b) within 24 months following clearing authorised under this permit, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit – by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) ripping the pit floor and contour batters within the extraction site; and
 - (iii) laying the vegetative material and topsoil retained under condition 2(a) on the cleared area(s); and
 - (iv) deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area; and
 - (v) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate* the area.
- (c) within 24 months of undertaking *revegetation* and *rehabilitation* in accordance with condition 2(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and

- (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 2(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, the Permit Holder must undertake additional *planting* or *direct seeding* of native vegetation in accordance with the requirements of condition 2(b)(v) and (vi) of this Permit.

3. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit, the date the extraction operations ceased.
- (b) In relation to the revegetation and rehabilitation of areas pursuant to condition 2 of this Permit:
 - (i) the location of any areas revegetated and rehabilitated, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) a description of the revegetation and rehabilitation activities undertaken; and
 - (iii) the size of the area revegetated and rehabilitated (in hectares).

4. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 3 (records to be kept) of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 10 November 2015, the Permit Holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

Definitions

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

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres of the area cleared.

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;

optimal time means the period from April to June; for undertaking *direct seeding*, and the period from May to June; for undertaking *planting*;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

riparian vegetation has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

wetland/s means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

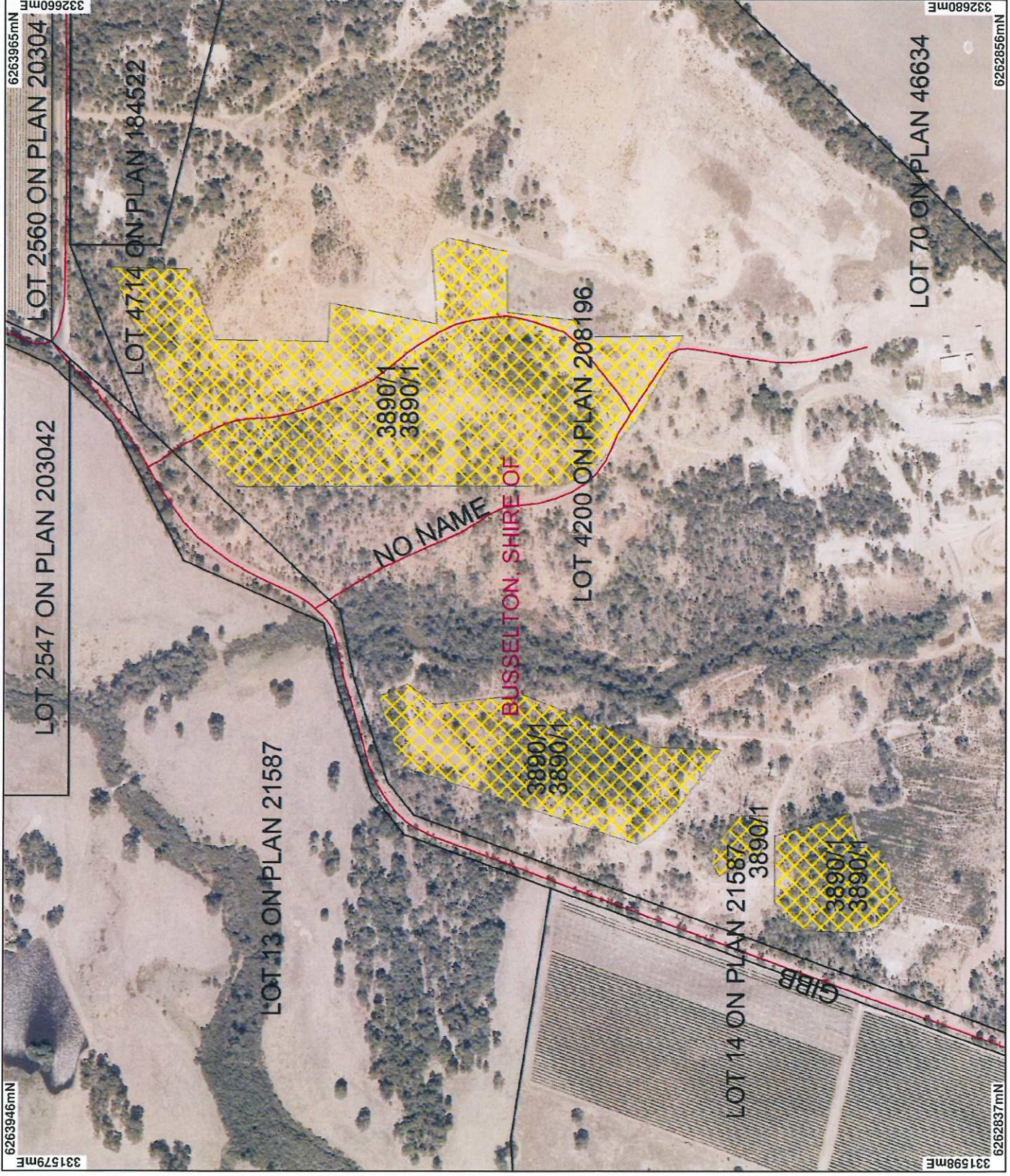


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

17 February 2011

Plan 3890/1



LEGEND

Clearing Instruments

- Areas Applied to Clear
- Areas Subject to Conditions
- Areas Approved to Clear
- Road Centrelines
- Cadastre

Local Government Authorities

- Busselton 50cm Orthomosaics - Landgate 2007

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



0 150 m

Scale 1:5278

(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.

[Signature] Date 17/2/11

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.



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1. Application details

1.1. Permit application details

Permit application No.: 3890/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Busselton

1.3. Property details

Property: LOT 4200 ON PLAN 208196 (House No. 37 GIBB KALLOORUP 6280)
Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
13		Mechanical Removal	Extractive Industry

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation association 1181 is described as Shrublands; mallee scrub, Eucalyptus longicornis & E. sheathiana	The proposal is to clear 13 ha of native vegetation within Lot 4200 (a 104 ha property) for the purpose of gravel extraction. The vegetation within the areas under application is described as Allocasuarina fraseriana, Eucalyptus marginata and Corymbia calophylla low open forest; over Hibbertia hypericoides, Dryandra lindleyana, Grevillea trifida open low heath; over Mesomelaena tetragona, Tetraria spp. sedges and Patersonia umbrosa herbs	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation condition was determined from a site visit conducted by DEC officers on the 25 September 2010 (DEC 2010). This site visit described approximately 8.6 ha as 'degraded' with the remaining 4.4 ha as 'good' or 'very good'.
Beard vegetation association 1100 is described as Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree (Melaleuca spp.) (Shepherd 2009)	on orange/brown loamy sand with lateritic gravel (DEC, 2010).		
Mattiske Complex Yelverton (Y) is described as Woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Agonis flexuosas and open woodland of Corymbia calophylla on low undulating uplands in the humid zone			
Mattiske Complex Yelverton (Yw) is described as Woodland of Allocasuarina fraseriana-Nuytsia floribunda-Agonis flexuosa-Banksia attenuata on slopes and open forest of Corymbia calophylla-Eucalyptus patens-Eucalyptus marginata subsp. marginata on the lower slopes and woodland of Eucalyptus rudis-Melaleuca raphiophylla on valley floors in the humid zone (Mattiske and Havel 1998)			

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 13 hectares of native vegetation for gravel extraction. The areas under application are described as an open woodland consisting predominately of She-oak (*Allocasuarina fraseriana*), Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*) over *Kingia australis*, *Hakea amplexicaulis* and *Acacia extensa* shrublands (DEC, 2010a). The vegetation ranges in condition from 'degraded' to 'very good' (Keighery, 1994). The areas of vegetation under application located in the western part of Lot 4200 (approximately 4.4 hectares) are described as being in 'good' or 'very good' condition (Keighery, 1994). The remaining 8.6 hectare area of vegetation within the eastern of the lot has been impacted upon by past clearing and gravel extraction and the vegetation within this area is described as 'degraded' (Keighery, 1994).

The local area (10km radius) is highly cleared with approximately 15% of native vegetation remaining. The areas comprising vegetation described in good to very good (Keighery, 1994) condition are considered to be significant as remnants and are likely to support fauna of conservation significance, including Chuditch (*Dasyurus geoffroii*) and Quenda (*Isodon obesulus fusciventer*).

Given that the local area (10km radius) is highly cleared with approximately 15% of native vegetation remaining, the 4.4 hectares of native vegetation in the western parts of Lot 4200 that are in good to very good condition may provide habitat for a number of fauna of conservation significance and therefore the clearing as proposed may be at variance to this Principle.

Methodology

References:

DEC (2010a)

Keighery (1994)

Western Australian Herbarium (1998-)

GIS Databases:

- Busselton 50cm Orthomosaic - Landgate 2007

- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

- SAC Biodatasets - accessed 19 August 2010

(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**

Six fauna species of conservation significance have been recorded within the local area (10km radius), including the Western ringtail possum (*Pseudocheirus occidentalis*), and Chuditch (*Dasyurus geoffroii*) which are listed as threatened and vulnerable respectively under the Wildlife Conservation Act 1950 (the WC Act) of Western Australia and threatened (vulnerable) under the Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act) of the Commonwealth of Australia. Carnaby's black cockatoos (*Calyptorhynchus latirostris*), listed as threatened under the WC Act and threatened (endangered) under the EPBC Act and Quenda (*Isodon obesulus fusciventer*) a priority 4 species under the WC Act were also recorded within the local area.

Chuditch are known to inhabit a range of habitats including open eucalypt woodlands and may be present within the areas under application. While Quenda prefer dense vegetation, they can often feed in more open areas and therefore they may be utilising the vegetation within the western areas of Lot 4200 that are considered to be in good to very good condition, for feeding activities.

The applicant has amended the application area so that no trees that contain hollows, or have the potential to develop hollows that may provide habitat to fauna indigenous to Western Australia, including Carnaby's black cockatoo's and Western ringtail possums, are within the areas under application (Shire of Busselton, 2010b)

The local area (10km radius) is highly cleared with approximately 15% of native vegetation remaining and as such available habitat is limited. Given that the areas under application in the western parts of Lot 4200 are considered to be in good to very good condition and that this vegetation may provide habitat for fauna of conservation significance within a highly cleared landscape, the clearing as proposed may be at variance to this principle.

Methodology

References

-Shire of Busselton (2010b)

-DEC (2010)

-Keighery (1994)

-McMahon (2010)

GIS Databases:

- Busselton 50cm Orthomosaic - Landgate 2007

- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

- SAC Biodatasets - accessed 19 August 2010

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

Comments Proposal is not at variance to this Principle

Eleven rare flora species have been recorded within the local area (10km radius), ten of which are known to occur on the same soil type (Western Australian Herbarium 1998-) as the area under application. Of these *Grevillea brachystylis* subsp. *grandis* is known to occur on the same mapped vegetation association as the area under application. In addition a site visit by DEC noted a number of *Banksia nivea* subsp. *uliginosa* adjacent to the areas under application (DEC, 2010). However, a targeted flora survey undertaken in November 2010 on behalf of the applicant identified no declared rare or priority flora within the application area (McMahon, 2010).

Given that a targeted flora survey has been undertaken of the application area and that no declared rare or priority flora was identified during this survey, the proposed clearing is not at variance to this clearing principle.

Methodology References

- DEC (2010)
 - McMahon (2010)
 - Western Australian Herbarium (1998-)
- GIS Database:
- SAC Biodatasets - accessed 19 August 2010
 - Busselton 50cm Orthomosaic - Landgate 2007
 - Soils, statewide
 - Pre-European Vegetation
 - Matiske Vegetation Complexes

(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 at variance to this Principle

There are three Threatened Ecological Communities (TECs) within the local area (10km radius) of the proposed clearing. TEC FCT01b (*Eucalyptus calophylla* woodlands on heavy soils of the southern Swan Coastal Plain) is listed as vulnerable with 10 records within the local area, the closest being 0.2km to the east of the area under application; TEC FCT10b (Shrublands on southern Swan Coastal Plain Ironstones (Busselton area)) is listed as critically endangered with eleven records within the local area, the closest being 0.6km to the east of the areas under application; and TEC FCT10a (Shrublands on dry clay flats) is listed as endangered with one record in the local area, located 0.8km to the east of the areas under application.

A site visit by DEC described the vegetation under application as low open forest comprising of *Allocasuarina fraseriana*, *Eucalyptus marginata* and *Corymbia calophylla* low open forest on orange/brown loamy sand with lateritic gravel (DEC, 2010a). Given the presence of *Eucalyptus marginata* within the application area it is not considered that these TECs occur within the area under application, and the proposed clearing is therefore not at variance to this principle.

Methodology References:

- DEC (2010)
- GIS Databases:
- Busselton 50cm Orthomosaic - Landgate 2007
 - SAC Biodatasets - accessed 19 August 2010

(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 areas under application are located in the Swan Coastal Plain Bioregion, within which 39.16% of the pre-European vegetation remains (Shepherd 2009). The proposal also falls within the Shire of Busselton, of which 42.86% of pre-European vegetation remains (Shepherd 2009).

The majority of the vegetation within the areas under application (95%) is mapped as Beard vegetation association 1181 with the remaining vegetation mapped as Beard vegetation association 1000. These vegetation associations retain 40.07% and 28.93% respectively, of the pre-European vegetation extent (Shepherd, 2009). The areas under application have also been mapped as Matiske vegetation complexes Y (covers 97% of the areas) and Yw (covers 3% of the areas) which retain 30.23% and 24.13% (926 ha remaining), respectively, of their pre-European vegetation extent (Matiske and Havel, 1998).

In addition the local area is highly cleared, with approximately 15% native vegetation remaining in a 10km radius. The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

Given that the mapped Mattiske vegetation complexes of the areas under application are at or below the 30% threshold, that the local area (10km radius) is highly cleared and that the areas under application located in the western parts are considered to be in 'good' to 'very good' condition and may provide habitat to fauna of conservation significance; the clearing as proposed may be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions*				
SCP	1 501 209	587 889	39.16	33.10
Shire*				
Busselton	146 478	62 783	42.86	64.91
Beard Vegetation Association*				
1181	14 459	5 793	40.07	48
1000	99 800	28 877	28.93	15.99
Beard Vegetation Association with Bioregion*				
1181	9 238	3 706	40.12	40.6
1000	5 428	3 143	57.91	12.99
Mattiske Complex**				
Y	7 637	2 308	30.23	12.16
Yw	3 841	926	24.13	5.19

* (Shepherd 2009)

** (Mattiske and Havel, 1998)

Methodology References
 - Commonwealth of Australia (2001)
 - Shepherd (2009)
 - Mattiske and Havel (1998)
 GIS Database:
 - Pre-European Vegetation
 - Mattiske Vegetation Complexes
 - NLWRA, Current Extent of Native Vegetation
 - Interim Biogeographic Regionalisation of Australia
 - Local Government Authorities - DLI 8/07/04

(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

An unnamed perennial watercourse runs between (within 30m of) the western and central areas under application. This watercourse feeds into the Carburnup River, a major perennial river located approximately 200m to the north of the areas under application.

Given that the application area is located within 30m of a watercourse it may support riparian vegetation and therefore the clearing as proposed may be at variance to this principle.

Methodology GIS Databases
 - Hydrography linear,
 - Topography, statewide

(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 areas proposed to be cleared are within an area of low risk for Acid Sulphate Soils. The risk of salinity has also been mapped as low.

The mapped soil is Fey earths, which are often found in association with leached sands and ironstone gravels (Northcote et al, 1960-68). Given the size of the application area, the medium relief and the soils present, there is only a low risk of wind and water erosion causing localised land degradation. Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology References
 - Northcote et al (1960-68)

- GIS database:
- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06
 - Salinity Risk LM 25m - DOLA 00
 - Soils, Statewide DA 11/99
 - Topographic contours statewide - DOLA and ARMY 12/09/02
 - Soils, statewide

(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

There are 5 conservation areas within the local area with the closest being an unnamed nature reserve located 4.5km to the southeast. In addition DEC is in the process of obtaining vesting over vegetation located in the northeast corner of Lot 4200 (DEC 2010a). The areas under application are within 30m of this proposed DEC estate, which supports the vulnerable TEC FCT01b, Priority 1 Ecological Communities Whicher Scarp Paluslope wetlands and Whicher Scarp Jarrah woodland of deep coloured sands and a number of priority flora species.

The applicant has amended the application area, following correspondence with DEC, in order to minimise impacts from the proposed clearing to this proposed DEC estate (Shire of Busselton, 2010a) and the proposed clearing is therefore not likely to be at variance to this principle.

Given the location of the proposed DEC managed land and the ecological values it supports, the clearing as proposed may be at variance to this principle.

- Methodology** References:
- DEC (2010a)
 - Shire of Busselton (2010a)
- GIS Databases:
- Busselton 50cm Orthomosaic - Landgate 2007
 - DEC Tenure
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001
 - SAC Biodatasets - accessed 19 August 2010

(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 may be at variance to this Principle

The proposed clearing is within the Hydrographic Catchments of the Caribunup and Buayanup Rivers and is within 30m of an unnamed minor, perennial water course that feeds into the Caribunup River. The areas under application are of moderate relief with a 5m to 10m gradient between the proposed clearing areas and the unnamed watercourse, creating some risk that run-off may enter the watercourse.

Given the size of the application area (13 ha), proximity to a perennial watercourse (within 30m) and the gradient towards the watercourse, the clearing as proposed may cause a deterioration in the quality of surface water and therefore may be at variance to this principle.

- Methodology** GIS Databases
- Hydrography linear,
 - Topography, statewide
 - Groundwater Salinity

(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 areas under application are of moderate relief and on soils described as Fey earths that are often found in association with leached sands and ironstone gravels (Northcote et al, 1960-68). Given the sandy nature and presence of gravel within the soils of the applied area, it is considered unlikely that flooding will result from the proposed clearing. The clearing as proposed is therefore not likely to be at variance to this principle.

- Methodology** References
- Northcote et al (1960-68)
- GIS Databases
- Soils, statewide
 - Topographic contours statewide - DOLA and ARMY 12/09/02

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

Comments

The application is located within proclaimed RIWI surface water and groundwater areas. Department of Water (DoW) advise that the proposal will impact upon ground and surface waters if stormwater is not adequately managed, A 2m vertical separation between the maximum groundwater level and the floor of the gravel pit must be maintained, a permit will be required to interfere with beds and banks should there be a crossing of the water course, as well as a permit for any dewatering outside of that allowed by the RIWI exemption (DoW, 2010). DoW also recommends retaining a minimum 30m vegetated buffer from the outermost water dependent vegetation and rehabilitation of the existing ~100m disturbed and cleared buffer area associated with the water course (DoW, 2010).

Lot 4200 (also known as Reserve 25325) is vested with the Shire of Busselton for the purposes of gravel extraction and motor cycle racing. The property has been previously used for gravel extraction and motorcycle racing (DEC, 2010a).

The applicant has twice amended the original application area (Shire of Busselton, 2010a and Shire of Busselton, 2010b), following correspondence from DEC (DEC, 2010b). The areas under application have been amended to exclude trees that contain hollows, or the potential to develop hollows that may provide habitat to a number of bird and mammal species (Shire of Busselton, 2010b). The areas under application have also amended an area where the rare flora *Banksia nivea* subsp. *uliginosa* was noted during DEC's site visit (DEC, 2010a) and also is considered to act as a buffer to the vulnerable Threatened Ecological Community (TEC) FCT01b (*Eucalyptus callophylla* woodlands on heavy soils of the southern Swan Coastal Plain) and the Priority 1 Priority Ecological Communities Whicher Scarp Paluslope wetlands and Whicher Scarp Jarrah woodland of deep coloured sands, identified on the adjoining property, Lot 4714, to the east of the area under application. It is considered that the modified application area is no longer likely to contain trees that contain hollows, or the potential to develop hollows that may provide habitat to a number of bird and mammal species or impact upon the identified rare flora and ecological communities.

Methodology

References:

- DoW (2010)
 - DEC (2010a)
 - DEC (2010b)
 - Shire of Busselton (2010a)
 - Shire of Busselton (2010b)
- GIS Database:
- RIWI Act, Areas - DOW
 - RIWI Act, Groundwater Areas - DOW

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2010a) Site Inspection Report for Clearing Permit Application CPS 3890/1, Lot 4200 North Jindong Road, Koorup. Site inspection undertaken 25/08/2010. Department of Environment and Conservation, Western Australia (TRIM Ref. A332567).
- DEC (2010b) Correspondence from DEC to the Shire of Busselton Dated 14 October 2010 (DEC ref: A340355).
- DoW (2010) Rights In Water and Irrigation advice. DEC ref: A334383.
- 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, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- McMahon, G. (2010) Application to clear native vegetation: Reserve 25325 Gibb Road, Koorup ' Shire of Busselton. DEC reference CPS 3890/1. (DEC ref: A354640).
- 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.
- 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.
- Shire of Busselton (2010a) Correspondence from the Shire of Busselton dated 7 December 2010 (DEC ref:A354640).
- Shire of Busselton (2010b) Correspondence from the Shire of Busselton dated 4 February 2011 (SoB ref: 1612874 LR3004 Reserve 25325), (DEC ref:A367454).
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 19/08/2010).

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)