



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Purpose Permit Number: 2458 / 3
File Number: DEC7256
Duration of Permit: From 26 July 2008 to 26 July 2013

PERMIT HOLDER

State of Western Australia (Landcorp)

LAND ON WHICH CLEARING IS TO BE DONE

LOT 175 ON PLAN 91417 (Lot No. 175 SALTER GRACETOWN 6284)
LOT 300 ON PLAN 50242 (GRACETOWN 6284)
LOT 176 ON PLAN 185862 (House No. 37 SALTER GRACETOWN 6284)
LOT 85 ON PLAN 240093 (Lot No. 85 SALTER GRACETOWN 6284)

PURPOSE FOR WHICH THE CLEARING MAY BE DONE

Clearing for the purposes of geotechnical, hydrogeological and subterranean fauna and soil contamination surveys.

CONDITIONS

1. The Permit Holder must not clear more than 0.56 hectares of native vegetation, within the areas hatched yellow on attached Plan 2458/3.

2. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared for the purposes of geotechnical, hydrogeological and subterranean fauna and soil contamination surveys 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.

3. Dieback and Weed Control

(a) When undertaking any clearing or other activity pursuant to this Permit the Permit Holder must take the following steps to minimise the risk of introduction and spread of *dieback*:

- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (ii) avoid the movement of soil in wet conditions;
- (iii) ensure that no *dieback*-affected *road building materials, mulch* or *fill* are brought into an area that is not affected by *dieback*; and
- (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

- (b) When undertaking any clearing or other activity pursuant to this Permit the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed-affected road building materials, 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.

4. Records must be kept

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

- (a) the species composition, structure and density of the cleared area;
- (b) the location where the clearing occurred, recorded using Geocentric Datum Australia 1994;
- (c) the date that the area was cleared; and
- (d) the size of the area cleared (in hectares).

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) Before the expiry of the permit, 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;

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.

road building materials means rock, gravel, soil, stone, timber, boulders and water;

weed 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 Agricultural and Related Resources Protection Act 1976.

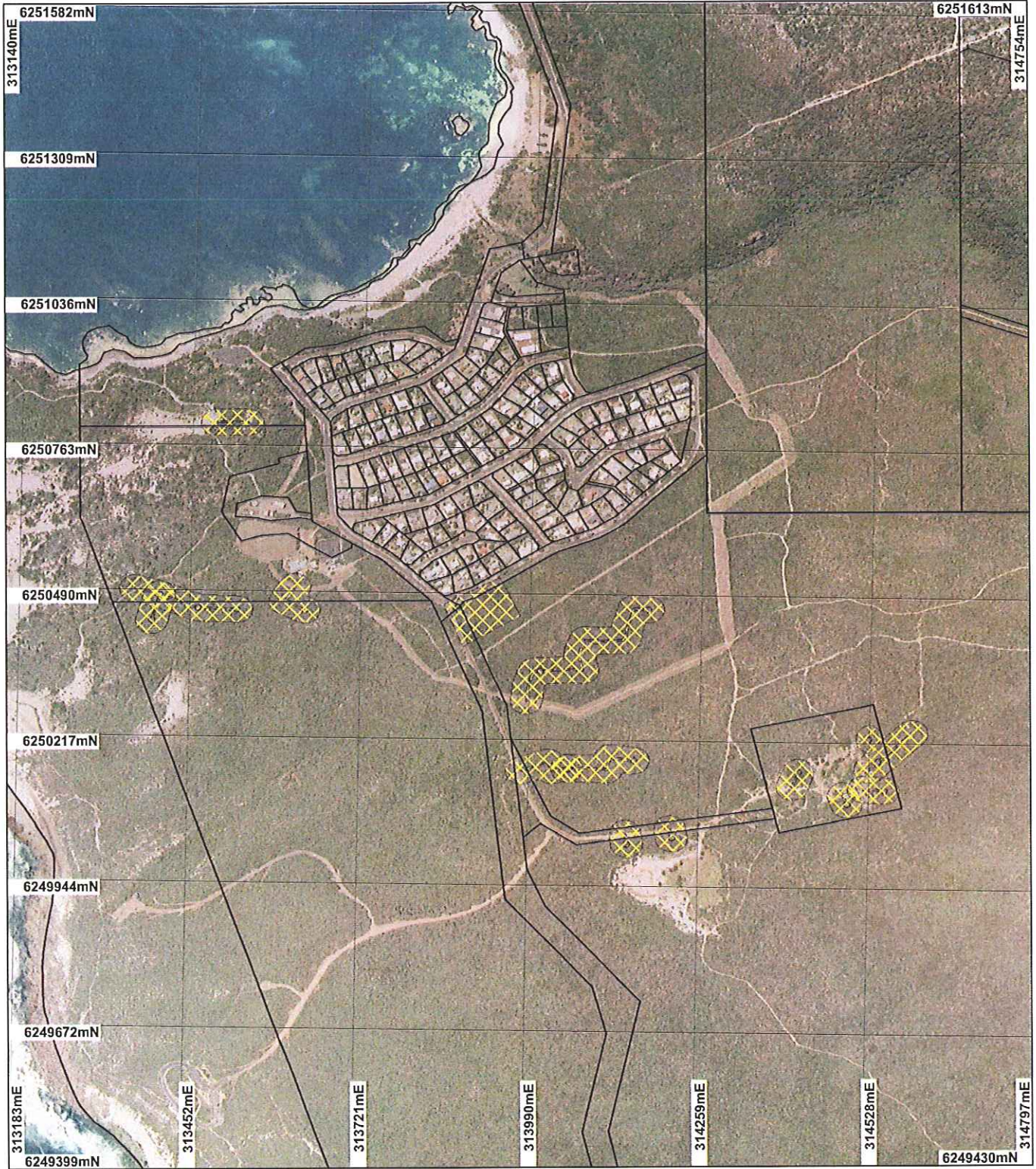


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

14 May 2009

Plan 2458/3



LEGEND

- Clearing Instruments**
- Areas Approved to Clear
- Cadastre
- Busselton 50cm Orthomosaic - Landgate 2004



Scale 1:9582
(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 14/5/09

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.



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1. Application details

1.1. Permit application details

Permit application No.: 2458/3
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: State of Western Australia (Landcorp)

1.3. Property details

Property: LOT 175 ON PLAN 91417 (Lot No. 175 SALTER GRACETOWN 6284)
 LOT 85 ON PLAN 240093 (Lot No. 85 SALTER GRACETOWN 6284)
 LOT 300 ON PLAN 50242 (GRACETOWN 6284)
 LOT 176 ON PLAN 185862 (House No. 37 SALTER GRACETOWN 6284)
 ROAD RESERVE (GRACETOWN 6284)

Local Government Area: Shire Of Augusta-Margaret River

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.56		Mechanical Removal	Fauna and soil contamination surveys

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>The vegetation within the eastern section of Lot 85 consists of Beard vegetation association 1108: Shrublands; Acacia decipiens.</p> <p>Within the western section of Lot 85 the vegetation is mapped as Beard 128: hummock grasslands, shrub steppe; kanji over soft spinifex & Triodia wiseana on basalt (Shepherd et al. 2006).</p> <p>Mattike Kilcarnup (KE) is also mapped as occurring within Lot 85, This is described as: Mattiske Vegetation type Kilcarnup (KE); Tall shrubland to closed heath of Agonis flexuosa-Spyridium globulosum on exposed slopes of calcareous dunes in hyperhumid to humid zones (Mattiske Consulting 1998)</p> <p>Within Lot 175 & Lot 300 the vegetation is mapped as consisting of Beard 1108 & Mattiske (Kr)</p> <p>Lot 176 consists of Beard 1108 and the Mattiske</p>	<p>The proposal is for the clearing of 0.56ha of native vegetation to facilitate geotechnical, hydro geological, subterranean fauna and soil contamination surveys, as the purpose of the clearing is for surveys and access tracks.</p> <p>Lot 85 is in pristine condition, Lot 175 and Lot 300 are in excellent condition, Lot 176 and road reserves are in degraded condition.</p>	<p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)</p>	<p>The description and condition of the vegetation was determined from site photos provided in Strategen (2008) and aerial mapping systems.</p>

complex Gracetown (GE):
Closed heath of *Olearia*
axillaris-Rhagodia baccata-
Agonis flexuosa on
seaward slopes in
hyperhumid to humid
zones (Mattiske Consulting
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 proposed clearing is 0.56 hectare to facilitate geotechnical, hydro geological, subterranean fauna and soil contamination surveys. The size of the clearing envelope has been altered and an additional area has been added to the area to be cleared, however no increase in the actual amount of vegetation cleared will result.

As the clearing is for surveys and access tracks the proposal consists of linear tracks with small circular clearing sites throughout Lot 85, Lot 176, Lot 175 and Lot 300. Based on the orthomosaic mapping system and the Strategen supporting documents (Strategen, 2008) the vegetation in Lot 85 is considered to be in pristine (Keighery 1994) condition, the vegetation in Lot 175 and Lot 300 are considered to be in excellent (Keighery 1994) condition and the vegetation in Lot 176 and road reserves are considered to be degraded (Keighery 1994).

The survey points within Lot 85 are the closest to Leeuwin-Naturaliste national park, being 40m east of the park. This national park is also classed as a Registered National Estate known as Leeuwin - Naturaliste Ridge Area. This area is significant because of its fragile coastline system with caves containing archaeologically important fossils, diverse endemic eucalyptus species, historic importance due to use by early settlers and pockets of karri forest (DEWHA 2008). The Registered National Estate comprises the same soil and vegetation type as proposed clearing areas.

The proposed clearing areas are 1.2km from a cluster of priority ecological communities (PEC). These PECs are described as low shrublands on acidic grey brown sand with a bleached surface derived from granite gneiss near the west coast of the Leeuwin-Naturaliste Ridge. One PEC is in the same vegetation type as the applied areas within Lot 300 and all PECs are in the same soil type as the proposed clearing areas. According to a flora survey commenced in 2005 by Mattiske Consulting (Mattiske, 2005) within the lots of the proposed clearing areas, three flora species occur which exists in the lots of the proposed areas and the PECs. The flora species include *Pimelea ferruginea*, *Pimelea rosea* and *Lepidosperma squamatum*. The PECs may occur in Lot 300, due to the same soil type and similar vegetation type.

The area under application is described as gently sloping plains with areas of laterite and broken by hills, ridges, and mesas; mainly on sandstones, siltstones, or granites and has a soil type described as yellow earthy sands (Northcote et al. 1960-68). The supporting documentation supplied by Strategen (2008) identified the Boranup vegetation system within the application area.

There are five records of priority flora within a 10km radius of the proposed site. These flora species include *Caladenia abbreviata* (Priority 2), *Dryandra sessilis* var. *cordata* (Priority 4), *Acacia subracemosa* (Priority 2), *Acacia cordifolia* (Priority 3) and *Bossiaea disticha* (Priority 3). Supporting documentation provided by strategen (2008) observed *Dryandra sessilis* var. *cordata* (Priority 4) growing within the application area.

All the priority species except for *Acacia subracemosa* grow in the same soil type as the area under application. *Caladenia abbreviata* and *Dryandra sessilis* var. *cordata* grow in the same vegetation type as the proposed clearing areas; therefore these taxa have the potential to grow in the proposed clearing areas.

Given *Caladenia abbreviata* and *Dryandra sessilis* var. *cordata* grow in the same soil type and vegetation type as the sites under application, the PECs may occur within the applied areas and the Registered National Estate comprises of the same vegetation and soil type as the applied areas, the proposed clearings may comprise a high level of biological diversity, therefore may be at variance to this principle. However, due to the size of the clearing, 0.56 ha (over approximately 29ha), the impact, if any, will be minimal and unlikely to compromise the maintenance of these priority flora and PEC populations.

Methodology DEWHA (2008)
Keighery (1994)
Mattiske Consulting (1998)
Mattiske Consulting Survey (2005)
Northcote et al. (2001)

Shepherd et al. (2001)
Strategen (2008)

GIS Database:

- DEFL, SAC Dataset (22/04/08)
- TEC Database, SAC Dataset (22/04/08)
- CALM Managed Lands and Waters - CALM 01/08/04
- Bussleton 50cm ORTHOMOSAIC - DLI04

(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

Within the local area (10km radius from the proposed clearing) there were five sightings of threatened fauna and one recorded sighting of a *Morelia spilota imbricata* (Carpet Python, priority 4). The threatened species include the *Chaaradrius rubricollis* (Hooded Plover), *Isodon obesulus* (Quenda), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Phascogale tapatafa* (Brush-tailed Phascogale) and *Moggridgea tingle* (Tingle Moggridgea Spider).

Supporting documentation provided by Strategen (2008) identified 19 birds, 6 mammals and one reptile of conservation significance that may occur within the application area. As the area is small and there are more suitable remnants of habitat nearby the application area is not considered to be significant habitat for the fauna identified by Strategen.

Due to the nature of the proposed clearing application areas (0.56 ha of scattered plots throughout approximately 23 ha) and the surrounding vegetation within a 10km radius (60%), it is unlikely that the clearing will pose a significant threat to habitat for fauna species and the clearing as proposed is therefore not likely to be at variance to this principle.

Methodology References:
Strategen (2008)

Threatened Fauna, SAC Bio Dataset (22/04/08)
CALM Managed Lands and Waters CALM 01/08/04
Bussleton 50cm ORTHOMOSAIC - DLI04

(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

Within the local area (10km radius) there is one record of rare flora, *Caladenia excelsa*.

The rare flora (*Caladenia excelsa*) is 2.4km east of the proposed clearing sites. The rare flora is growing in the same mapped soil type as the applied area, but is growing in different vegetation type to the proposed clearing areas. *Caladenia excelsa* are found to occupy deep sandy soils amongst dense, low shrubs in banksia, jarrah (*Eucalyptus marginate*) and marri (*Corymbia calophylla*) woodlands (Brown et al. 1998). The applied areas vegetation consists mainly of coastal heath of *Olearia axillaris*, *Rhagodia baccata* and scattered *Agonis flexuosa* and the soil description of the area under application differs from the preferred soil type of *Caladenia excelsa*. Therefore *Caladenia excelsa* is unlikely to grow in the proposed clearing site.

Supporting documentation supplied by Strategen (2008) identified one priority 1, one priority 3 and one priority 4 species within a 5 km radius of the applied area which may occur within the application area. Of these the priority 1 and 3 species were considered to have a low probability of occurring within the applied area while the priority 4 species (*Dryandra sessilis* var. *cordata*) was observed within the application area.

Therefore the proposal is not likely to be at variance to the principle as no rare flora are likely to occur within the application area.

Methodology Brown et al. (1998)
Northcote et al (1960-68)
Shepherd et al. 2001
Strategen (2008)
GIS Database:
- DEFL, SAC Bio Dataset (22/04/08)
- Mattiske Vegetation (1998)
- Bussleton 50cm ORTHOMOSAIC

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

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

There are no known threatened ecological communities (TECs) within the application area or local area (10km radius). Therefore the clearing as proposed is not at variance to this principle.

Methodology GIS Database:
- TEC, SAC Bio Databset (19/05/08)

(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 IBRA, shire and vegetation communities for the areas under application are above the threshold to clear land (30%) (Commonwealth Australia 2001). Due to the size of the applied area (0.56ha) and the amount of surrounding vegetation present (approximately 85% of the local area), the proposed clearing is not at variance to this principle as the vegetation is not considered to be a significant remnant in highly cleared areas.

	Pre-European	Current Extent	Remaining %
IBRA Bioregions			
Warren			
1108	8767.423	8116.547	92.6
128	431.687	265.463	61.5
Shire of Augusta-Margaret River			
1108	8377.552	7672.388	91.6
128	22.474	13.650	60.7
Vegetation Association Beard Unit:			
1108	9060.153	8133.825	89.8
128	331814.486	283098.990	85.3
Mattiske Vegetation			
KE (Lot 85)	60,747	53,725	88.4
Kr (Lot 175, 300)	24,192	20,754	85.8
GE (Lot 300, 176, Road Reserves)	48,236	47,019	97.5

Methodology Commonwealth Australia (2001)
Shepherd et al. (2006)
Mattiske Consulting (1998)
GIS Database:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- SAC Bio DataSet 22/04/08
- Mattiske Vegetation (01/03/1998)
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01

(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 at variance to this Principle

There is one minor water course near the proposed clearing sites, known as the Cowarmup Brook Stream. It is 630m from the site under application. The site is not considered to be in association with any water courses or wetlands and therefore clearing will have no impact on the tributary banks, habitat for aquatic fauna or water quality.

The proposal is therefore is not at variance to this principle.

Methodology GIS Database:
- Hydrography linear (hierarchy) - DoW 13/7/06

(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 area under application is described as gently sloping plains with areas of laterite and broken by hills,

ridges, and mesas; mainly on sandstones, siltstones, or granites and has a soil type described as yellow earthy sands (Northcote et al. 1960-68). Due to the proposed clearing areas location, the areas are exposed to a sea breeze and given the earthy sands which the areas under application are within, wind erosion is a risk. However, as the areas under application are small and are surrounded by vegetation therefore the risk of wind erosion is small.

Supporting documentation provided by Strategen (2008) provided information on the soils of the application area as recorded by an onsite investigation conducted by GHD Pty Ltd in 2007 as "orange brown, medium grained surface soils dominated by quartz sand, with occasional limestone outcrops."

The topography of the areas under application varies; Lot 85 is between 15 and 20m (low relief), Lot 175 is between 45 and 30m (low relief), Lot 176 is between 110 and 115 (low relief), Lot 300 is between 60 and 95m (high relief) and road reserves are between 90 and 95m (low relief) AHD (Australian Height Datum). The Gracetown land area graduates to the ocean. The mean annual rainfall is 1100mm per annum and the evapotranspiration rate is 800 mm.

As the clearing is on sloped dune systems and the rainfall is high, water erosion may be a risk when clearing. However, the amount of clearing is small (0.56 ha within an area of approximately 8.13 ha) and therefore, water erosion risks are low.

The soil has good drainage due to the earthy sands, the size of the area (0.56ha), the evaporation rate is high (800mm) and the areas under application are generally on a sloped dune systems, waterlogging in the areas under application is unlikely to occur.

The proposed clearing is not likely to be at variance to this Principle.

Methodology Northcote et al. (1960-68)
Strategen (2008)
GIS Database:
- Evapotranspiration Areal Actual (30/09/2001)
- Hydrogeology, Statewide (05/02/02)
- Groundwater Salinity Statewide ? DoW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- 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 may be at variance to this Principle

The proposed clearing sites are surrounded by the Leeuwin-Naturaliste National Park (40m west from proposed clearings in Lot 175 and 195m north from proposed clearings in Lot 300). Leeuwin-Naturaliste National Park stretches for 120 kilometres along the coast between Cape Naturaliste and Cape Leeuwin. The Leeuwin-Naturaliste National Park is also classed as a Registered National Estate known as Leeuwin - Naturaliste Ridge Area. This area is significant because of its fragile coastline system, caves containing archaeologically important fossils, diverse endemic eucalyptus species, historic importance due to use by early settlers and pockets of karri forest (DEWHA 2008). The Registered National Estate comprises of the same soil and vegetation type as proposed clearing areas.

Supporting documentation provided by Strategen (2008) identified 33 introduced species within the application area. Of these one is a Declared Plant (Arum Lily). If granted, conditions will be placed on the permit to mitigate the risk of spread of weeds into nearby conservation areas.

Given the scale of the proposed clearings (0.56ha within approximately 29 ha) and the close proximity to conservation areas, the proposed clearing may impact on the environmental values of nearby conservation areas through the invasion of weed species.

Methodology DEWHA (2008)
Strategen (2008)
GIS Database:
- CALM Managed Lands and Waters CALM 01/08/04
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

(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 at variance to this Principle

The area under application is described as gently sloping plains with areas of laterite and broken by hills, ridges, and mesas; mainly on sandstones, siltstones, or granites and has a soil type described as yellow earthy sands (Northcote et al. 1960-68).

The mean annual rainfall is 1100mm per annum and the evapotranspiration rate is 800 mm.

Given that the small scale of the area under application is 0.56ha (within approximately 29 ha), that the proposed clearing is not associated with any wetlands, that it is 630m from a watercourse and that there is a high amount of surrounding native vegetation, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water and therefore is not at variance to this principle.

Methodology Northcote et al. (1960-68)
GIS Database:
- Evapotranspiration Areal Actual (30/09/2001)
- Hydrogeology, Statewide (05/02/02)
- Groundwater Salinity Statewide ? DoW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02
- Soils, Statewide DA 11/99

(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 areas under application are described as gently sloping plains with areas of laterite and broken by hills, ridges, and mesas; mainly on sandstones, siltstones, or granites and has a soil type described as yellow earthy sands (Northcote et al. 1960-68). The mean annual rainfall is 1100mm and the evapotranspiration rate is 800 mm.

Given that the soil has good drainage due to the earthy sands, the size of the area (0.56ha) is small, the evaporation rate is high (800mm) and the areas under application are generally on a sloped dune system, flooding in the applied areas is unlikely to occur. The proposal is therefore is not at variance to this principle.

Methodology Northcote et al. (1960-68)
GIS Databases:
- CALM Managed Lands and Waters CALM 01/08/04
- Topographic Contours, Statewide - DOLA 12/09/02
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Soils, Statewide DA 11/99

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

Comments

Stratgen Environmental Consultants have obtained authorisation from the Shire of Augusta-Margaret River to clear the proposed areas within the road reserves. Permissions have been granted by the Department of Planning and Infrastructure for works within Lot 85 (TRIM Ref DOC53612) and Lots 175, 176 and 300 (TRIM Ref DOC53869).

The application was amended to include extra areas not present on CPS 2458/2.

Methodology GIS Database:
- Aboriginal Sites of Significance (26/04/2007)

4. Assessor's comments

Comment

Assessable criteria have been addressed and the proposal may be at variance to Principle (a) and (h), is not likely to be at variance to Principles (b), (c) and (g) and is not at variance to the remaining Principles.

5. References

- Brown A., Thomson-Dans C. and Marchant N. (1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.
- Department of the Environment, Water, Heritage and the Arts (2008) Leeuwin - Naturaliste Ridge Area (RNE), Department of the Environment, Water, Heritage and the Arts, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed June 2008
- 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 (2006) Flora and Vegetation on the proposed Gracetown development site
- 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.

- 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. (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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.
- Strategen (2008) Application for a clearing permit and supporting documentation, prepared by Strategen Environmental consultants, unpublished document, Trim Ref DOC51356.

6. 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)