



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5912/1
Permit Holder:	Shire of Denmark
Duration of Permit:	8 March 2014 – 8 March 2019

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of constructing the a dual use pathway (Wilderness Ocean Walk trail)

2. Land on which clearing is to be done

Lot 556 on Plan 71707, Reserve 24913 (Ocean Beach 6333)

Lot 555 on Plan 71707 (Ocean Beach 6333)

Lot 7622 on Plan 14650, Reserve 39727 (Ocean Beach 6333)

3. Area of Clearing

The Permit Holder must not clear more than 1.66 hectares of native vegetation within the area hatched yellow on attached Plan 5912/1a, Plan 5912/1b, Plan 5912/1c and Plan 5912/1d.

4. Application

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

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

PART II – MANAGEMENT CONDITIONS

6. Dieback and weed control

(a) 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*:

- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (ii) ensure that no *dieback* or *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.

DEFINITIONS

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

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

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

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;

soil disease status means soil types either infested, not infested, uninterpretable or not interpreted with a pathogen; and

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

6 February 2014

Plan 5912/1a



LEGEND

- ✓ Road Centrelines
 - Local Government Authorities
 - Cadastral for labelling
 - Clearing Instruments
 - Areas Subject to Clear
 - Areas Subject to Conditions
 - Areas Approved to Clear
- Denmark Townsite Jan 2011 Mosaic

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



Scale 1:7000
 (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.

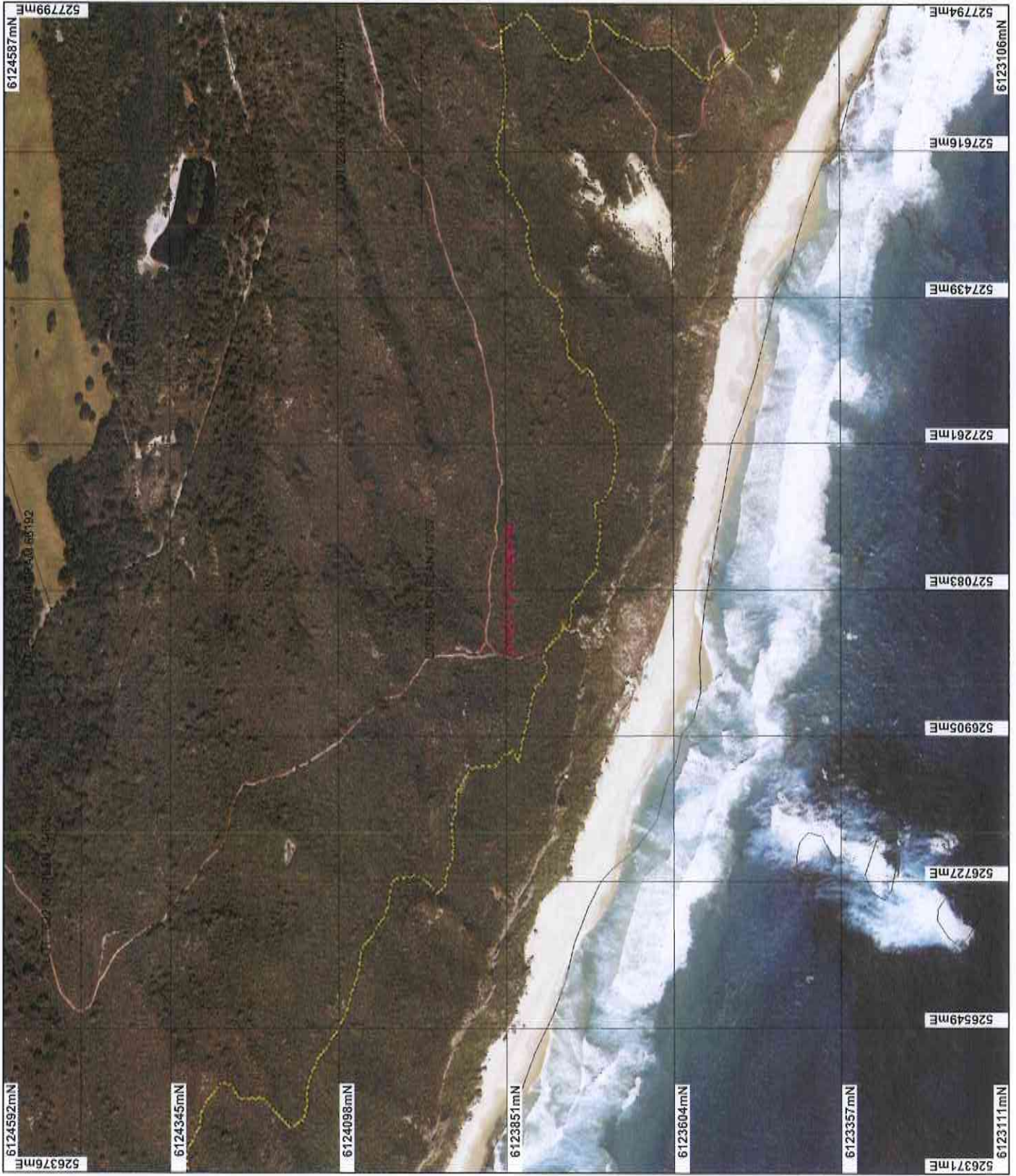
M Waincock Data 6/2/14

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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 Department of Environment Regulation
 WA Clear Copyright 2002

Plan 5912/1b



LEGEND

- Road Centrelines
 - Local Government Authorities
 - Cadastre for labelling
 - Clearing Instruments
 - Areas Applied to Clear
 - Areas Subject to Conditions
 - Areas Approved to Clear
- Denmark Townsite Jan 2011 Mosaic

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



Scale 1:7000
 (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.

M. Wainock Date **6/2/14**

M. Wainock
 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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Plan 5912/1c



LEGEND

- ✓ Road Centrelines
- Local Government / Cadastre for Labelling
- Clearing Instrument
- Areas Applied to Clear
- Areas Subject to Conditions
- Areas Approved to Clear
- Denmark Townships

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



0 200 m

Scale 1:7000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

audited Date **6/2/14**

M. Wainrock

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

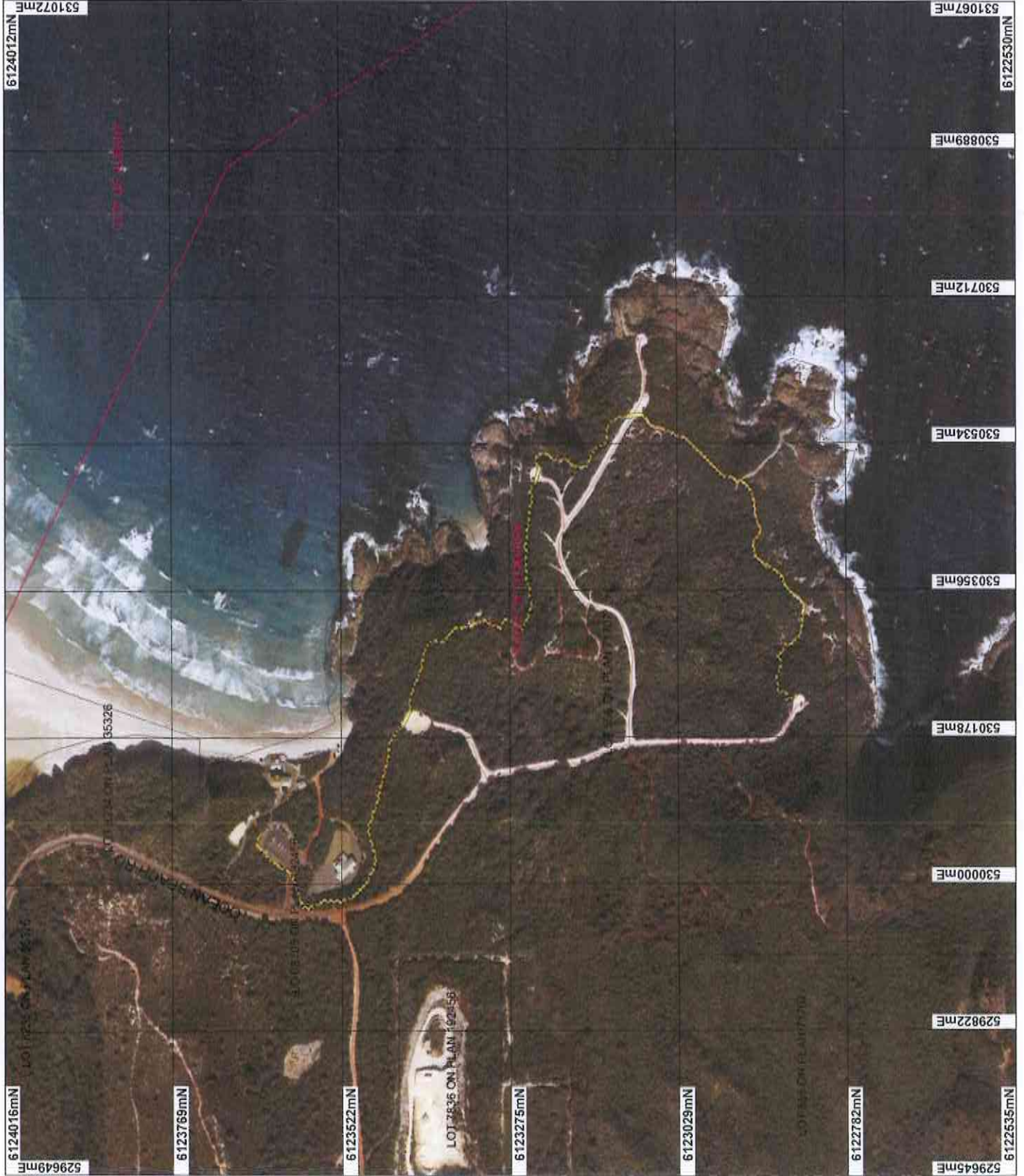
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Department of Environment Regulation

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Plan 5912/1d



LEGEND

- Road Centrelines
- Local Government / Cadastre for labelling
- Clearing Instrument
- Areas Applied to Clear
- Areas Subject to Condition
- Areas Approved to Clear
- Denmark Townsite

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



0 100 200 m

Scale 1:7000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

M. Warlock Date 6/2/14

M Warlock

Office 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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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5912/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Denmark

1.3. Property details

Property: LOT 556 ON PLAN 71707 (House No. 908 OCEAN BEACH OCEAN BEACH 6333)
LOT 555 ON PLAN 71707 (House No. 940 OCEAN BEACH OCEAN BEACH 6333)
LOT 7622 ON PLAN 14650 (Lot No. 7622 LIGHTS OCEAN BEACH 6333)
Local Government Area: Shire of Denmark
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 6 February 2014

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
Mapped Beard vegetation association 423 is described as shrublands; Acacia scrub-heath (unknown spp.) (Shepherd et al 2001).	Wilderness Ocean Walk Trail	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition and description of the native vegetation under application was determined by digital imagery and a Flora and Fauna Habitat Survey undertaken by Rathbone (2013).
Mattiske vegetation complex 'Mp' is described as a mosaic of open low woodland of Agonis flexuosa with some Eucalyptus cornuta, tall shrubland of Agonis flexuosa with Trymalium floribundum in gullies and closed heath of Olearia axillaris-Spyridium globulosum-Acacia littorea on stabilised dunes in the hyperhumid zone (Mattiske and Havel 1998).		To Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Seven vegetation communities have been mapped within the application area including: Spyridium globulosum and Agonis flexuosa shrubland, Spyridium globulosum shrubland with Banksia spp., Hakea oleifolia and Banksia sessilis shrubland, Banksia grandis and B. quercifolia low open shrubland, Banksia littoralis shrubland, Cyathochaeta equitans sedgeland and Lepidosperma gladiatum sedgeland (Rathbone 2013).

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 applicant proposes to clear 1.66 hectares of native vegetation for the purpose of constructing a dual use pathway (Wilderness Ocean Walk Trail).

The proposed dual use pathway is 7.6 kilometres long, the trail will predominately traverse through the natural vegetation within the coastal reserve and will also follow some existing sections of the Bibbulum Track, the Sinkers Bay Trail and the Denmark Windfarm access road (Rathbone 2013).

One hundred and thirty eight taxa from 48 families were recorded within the application area. Seven vegetation communities have been mapped within the application area including: Spyridium globulosum and Agonis flexuosa shrubland, Spyridium globulosum shrubland with Banksia spp., Hakea oleifolia and Banksia sessilis

shrubland, *Banksia grandis* and *B. quercifolia* low open shrubland, *Banksia littoralis* shrubland, *Cyathochaeta equitans* sedgeland and *Lepidosperma gladiatum* sedgeland (Rathbone 2013).

A number of rare and priority flora have been recorded within the local area (10 kilometre radius). A flora survey undertaken within the area under application in October and November 2013 identified one Priority Four flora species within the area under application. Priority Four flora species are considered to have been adequately surveyed, or for which sufficient knowledge is available and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. Two populations of the Priority Four flora species were identified, one comprising of approximately 200 individuals of which 20 - 30 (approximately 10 per cent) individuals will be impacted by the proposed clearing (Rathbone 2013). A second smaller population comprising of five plants was identified outside the application area which will not be impacted by the proposed clearing (Rathbone 2013). The clearing proposed is not likely to have a significant impact on the conservation status of the Priority Four flora species.

Numerous fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the local area (10 kilometre radius) including: *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Cynotelopus notabilis* (WA Pill Millipede), *Dasyornis longirostris* (Western Bristlebird), *Dasyurus geoffroyi* (Chuditch), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed Phascogale), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Puffinus huttoni* (Hutton's Shearwater), *Setonix brachyurus* (Quokka) (DEC 2007-). The area under application may provide habitat for avian and ground dwelling fauna however the proposed clearing of 1.66 hectares over 7.6 kilometres is not likely to have a significant impact on habitat for fauna species indigenous to Western Australia.

The vegetation surrounding the application is in a very good (Keighery 1994) condition. The clearing proposed may indirectly impact the adjacent vegetation through the spread of weeds and dieback. Weed and dieback management practices will help mitigate this risk.

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

Methodology

References:

- DEC (2007-)
- Rathbone (2013)

GIS Databases:

- SAC Datasets accessed - January 2014

(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

Numerous fauna listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the local area (10 kilometre radius) including: *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Cynotelopus notabilis* (WA Pill Millipede), *Dasyornis longirostris* (Western Bristlebird), *Dasyurus geoffroyi* (Chuditch), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed Phascogale), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Puffinus huttoni* (Hutton's Shearwater), *Setonix brachyurus* (Quokka) (DEC 2007-).

Approximately 0.575 hectares of the application area contains potential foraging habitat for the black cockatoo species (Rathbone 2013). Evidence of black cockatoo foraging was observed at a number of locations within the application area (Rathbone 2013). The vegetation surrounding the application is in a very good (Keighery 1994) condition. Given the long linear shape of the application area, the clearing proposed is not likely to have a significant impact on the black cockatoo species.

The area under application may provide habitat for other avian and ground dwelling fauna however the proposed clearing of 1.66 hectares over 7.6 kilometres is not likely to have a significant impact on habitat for fauna species indigenous to Western Australia.

The fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area, and no significant loss of habitat for fauna indigenous to Western Australia is expected.

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

Methodology

References:

- DEC (2007-)
- Rathbone (2013)

GIS Databases:

- SAC Datasets accessed - January 2014

(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**
 Three species of rare flora have been recorded within the local area (10 kilometre radius). The closest being recorded approximately 680 metres west of the application area. This species grows in sandy soil pockets in granite outcrops (Western Australian Herbarium 1998-).

A flora survey undertaken in October and November 2013 did not record any rare flora within the area under application (Rathbone 2013).

Methodology Given the above the clearing as proposed is not likely to be at variance to this principle.
 References:
 - Rathbone (2013)
 - Western Australian Herbarium (1998-)
 GIS Databases:
 - SAC Datasets accessed - January 2014

(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**
 No threatened ecological communities (TEC) have been recorded within the local area (10 kilometre radius). The closest record of a TEC is 'Mount Lindesay' which is located approximately 19 kilometres north of the area under application.

Methodology Given the distance to the closest TEC, the clearing as proposed is not likely to be at variance to this principle.
 GIS Databases:
 - SAC Biodatasets - accessed January 2014

(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 area under application is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 80 per cent of its pre European vegetation extent remaining (Government of Western Australia 2013).

The vegetation under application is mapped as Beard Vegetation Association 423 and Mattiske Vegetation Complex 'Mp' which have approximately 82 and 99 per cent of their pre-European extent remaining respectively in the Warren bioregion (Government of Western Australia 2013).

Digital imagery (Denmark Townsite Jan 2011 mosaic) indicates that the local area (10 kilometre radius) surrounding the area under application retains approximately 50 per cent vegetation cover.

Given the vegetation representation within the local area, the vegetation under application is not likely to be significant as a remnant in an extensively cleared landscape.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion* Warren	833,986	663,203	80	84
Shire* Shire of Denmark	190,533	144,331	76	78
Beard Vegetation Association in Bioregion* 423	15,176	12,428	82	36
Mattiske Vegetation Complex ** Mp	17,723	17,678	99	94

*Government of Western Australia (2013)

** Mattiske and Havel (1998)

Methodology **References:**
- Government of Western Australia (2013)
- Matiske and Havel (1998)

GIS Databases:
- Denmark Townsite Jan 2011 mosaic
- IBRA Australia
- Local Government Authorities - Landgate
- Pre-European Vegetation

(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**

There are no watercourses or wetlands located within the area under application. A minor perennial watercourse is located 200 metres to the west of the proposed clearing. The closest major watercourse is located approximately five kilometres north of the application area.

The application area is approximately 200 metres from the coastal water line.

Given the distance to the closest watercourse, the vegetation proposed to be cleared is not likely to be growing in association with a watercourse or wetland.

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

Methodology **GIS Databases:**
- Hydrology, linear

(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 soil type within that application area has been mapped as 'Ca20' which is described as coastal dunes and plains: chief soils are leached sands of the inland dunes where there are swampy interdune flats of leached sands (Northcote et al 1960 - 1968).

The application area is long and linear in shape and follows some existing sections of the Bibbulum Track, the Sinker Bay Trail and the Denmark Windfarm access road. The clearing of 1.66 hectares of native vegetation over a 7.6 kilometre stretch is not likely to cause appreciable land degradation.

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

Methodology **References:**
- Northcote et al (1960 -1968)

GIS Databases:
- 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**

The area under application does not traverse any conservation areas. The closest conservation area is William Bay National Park which is located approximately 70 metres to the west of the western-most point of the proposed clearing. Mt Shadforth Nature Reserve (Class A) is located approximately 5 kilometres north of the proposed clearing.

The application area is long and linear and follows some existing sections of the Bibbulum Track, the Sinker Bay Trail and the Denmark Windfarm access road. In addition the application area is surrounded by vegetation in a very good (Keighery 1994) condition and the local area retains approximately 50 per cent vegetation cover. Therefore it is unlikely the clearing proposed will sever any fauna linkages or reduce fauna movement across the landscape.

The clearing of 1.66 hectares of native vegetation over a 7.6 kilometre stretch is not likely to have an impact on the environmental values of any nearby conservation areas.

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

Methodology GIS Databases:
- DPaW, tenure

(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**

There are no watercourses or wetlands located within the area under application. A minor perennial watercourse is located 200 metres to the west of the proposed clearing. The closest major watercourse is located approximately five kilometres north of the application area.

The application area is approximately 200 metres from the coastal water line. Given the distance to the closest watercourse, the clearing as proposed is not likely to cause deterioration in the quality of surface water.

Groundwater salinity ranges from 500 -1000 milligrams per litre of Total Dissolved Solids (TDS) which is considered to be marginal. The clearing of 1.66 hectares over a 7.6 kilometre area is not likely to cause deterioration in the quality of groundwater.

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

Methodology GIS Databases:
- Groundwater Salinity
- Hydrology, linear

(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**

Given the long linear nature of the application area, the clearing of 1.66 hectares of native vegetation over a 7.6 kilometre stretch is not likely to cause or exacerbate the incidence or intensity of flooding.

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

Methodology

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

Comments

The Denmark Community Windfarm Ltd (DCW Ltd) has advised that they will approve the proposed portion of the Wilderness Ocean Walk Trail over their lease area within Lot 555 upon receipt of a formal indemnity by the Shire against injury and accident claim by Trail users. Approval will also be subject to the following conditions being met:

- Washdown of all plant and equipment prior to first entering the site and on each subsequent entry.
- Rehabilitation of native vegetation disturbed by works which do not comprise the Trail's running surface
- Provision of suitable signage in consultation with DCW Ltd.

The application area is zoned 'public use', 'rural' and 'parks and recreation' under the local town planning scheme.

The application area is located within the boundaries of the Southern Noongar Wagyl Kaip native title claimants registered area of interest. The Southern Noongar Wagyl Kaip native title claimants have been notified of the propose clearing. No comments have been received.

One submission (2013) has been received in relation to this application raising concerns regarding the spread of dieback and impacts to priority flora, these issues have been addressed under principle (a). In addition the submission raised concerns regarding errors in the road lines on the maps and the land use promoting off road vehicle use. These issues are not relevant to the assessment of clearing native vegetation and therefore have not been addressed in the above assessment.

Methodology References:
- Denmark Community Windfam Ltd (2014)
- Submission (2013)

4. References

- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed January 2014
- Denmark Community Windfarm Ltd (2014) location of portion of WOW Trail on WEF zone / DCW lease. Western Australia. DER Ref:A721626
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- 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.
- 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.
- Rathbone, D. (2013) Flora and Fauna Habitat Survey – Wilderness Ocean Walk. Western Australia. DER Ref: A719475
- 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.
- Submission (2013) Submission for Shire of Denmark, Purpose Permit Lot 555 and Lot 556 on Deposited Plan 71707 and Lot 7622 on Plan 14650, Ocean Beach. Western Australia. DER Ref: A713056.