



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5650/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Westdeen Holdings Pty Ltd**

1.3. Property details

Property: M70/250
Local Government Area: Shire of Gingin
Colloquial name: Lancelin Limesand Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6		Mechanical Removal	Sand Extraction and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 12 September 2013

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard associations are located within the application area (Government of Western Australia, 2013: GIS Database)

129: Bare areas; drift sand

1007: Shrublands; *Acacia lasiocarpa* & *Melaleuca acerosa* heath/shrublands; *Acacia rostellifera* & *Acacia Cyclops* thicket

A vegetation survey was conducted over the application area on 18 July 2013 by Biggs and Associates Consulting Services (Biggs) (2013). The survey found that the highly mobile sand dunes that are the target of the extraction operation have little to no vegetation cover (Biggs, 2013).

Aerial photography indicates that the permit area is made up of two distinct areas; the eastern side consists of isolated pockets of vegetation within a predominantly sand dune area, whilst the western side is considerably more vegetated. A site visit undertaken by the assessing officer on 28 August 2013 confirmed that the vegetation was very sparse on the sand dune, while the coastal plain at the base of the dune contained low shrubland.

Clearing Description Westdeen Holdings Pty Ltd (Westdeen) Lancelin Limesand Project. The proposal is for the clearing of 6 hectares of native vegetation within an application permit boundary of approximately 50 hectares for the purpose of extracting limesand. The proposal is approximately one kilometre south-east of Lancelin.

Vegetation Condition Good: Structure significantly altered by multiple disturbances; retains basic structure/ability to regenerate (Keighery 1994).

Comment The proposed clearing is to enable the ongoing removal of limesand from the coastal dune system. Clearing activities will be predominantly undertaken on the dune, with some additional clearing required through the western vegetation area for an access track (Biggs, 2013). After areas have been excavated, stockpiled vegetation is used to progressively rehabilitate the site (Biggs, 2013).

The vegetation condition was assessed by the assessing officer during a site visit on 28 August 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 is not likely to be at variance to this Principle**
The application area falls within the Swan Coastal Plain (SWA02) subregion of the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). This subregion is described as a low lying coastal plain, mainly covered with woodlands (CALM, 2002). It is dominated by Banksia or Tuart on sandy soils, *Casuarina obesa* on outwash plains and paperbark in swampy areas (CALM, 2002).

A combined flora and fauna investigation has been undertaken over the application area (Biggs, 2013). The investigation consists of a threatened and priority flora and fauna database search and targeted survey of the site (Biggs, 2013). The database search has identified 24 species of flora and fauna within a two kilometre buffer of the application area (Biggs, 2013). The assessing officer has determined via a database search that the 24 species comprises 18 fauna and 6 flora species (DEC, 2013).

Three Priority flora species; *Hibbertia sp.* (Priority 3), *Stylidium maritimum* (Priority 3), and *Conostylus pauciflora* subsp. *euryrhipis* (Priority 4) and one Priority fauna species; Southern Brown Bandicoot (Priority 5) were identified within two kilometres of the application area (Biggs, 2013). None of these species were found within the application area (Biggs, 2013).

A site visit was undertaken by the assessing officer on 28 August 2013. It was noted that vegetation on the sand dune was confined to isolated pockets of scrub, while the remainder of the application area was made up of low coastal shrubland. It is not considered likely that the vegetation within the application area contains a higher diversity of flora and fauna species than other areas of native vegetation in the local area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biggs (2013)
CALM (2002)
DEC (2013)
GIS Database:
- IBRA WA (regions - subregions)

(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

Biggs (2013) has undertaken a fauna investigation consisting of a threatened and priority fauna database search and targeted survey of the site. Biggs (2013) has concluded that seven conservation significant species may occur within the application area. These species are; Southern Brown Bandicoot, Carnaby's Black Cockatoo, Malleefowl, Australian Painted Stipe, Australian Fairy Tern, Western Quoll and Shield-backed Trapdoor Spider (Biggs, 2013).

The site survey conducted by Biggs (2013) did not record any evidence of these species using the site. Taking into account the preferred habitat and range of these species, it is considered unlikely that the proposed clearing will have an impact on the habitat of conservation significant fauna.

The vegetation within the application area consists of low coastal shrubland and isolated pockets of dune scrub within a predominantly sand dune environment. The small scale clearing of this type of vegetation is unlikely to impact on the overall habitat of conservation significant species within the area, especially given there are areas of extensive vegetation directly to the east of the application area (GIS Database).

Methodology Biggs (2013)
GIS Database:
- Lancelin Townsite Mar 2011 Mosaic

(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

According to available databases, there are no records of Threatened Flora species within the application area (GIS Database). A search of the Department of Environment and Conservation's Threatened and Priority Flora databases identified no Threatened Flora species as occurring within a 10 kilometre radius of the application area (DEC, 2013).

No threatened flora was recorded during the vegetation survey undertaken by Biggs (2013).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Biggs (2013)
DEC (2013)
GIS Database:
- Threatened and Priority Flora

(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

According to available databases, there are no known Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest known TEC is approximately 34 kilometres south-east of the application area (GIS Database).

Based on the above the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- Threatened Ecological Sites Buffered

(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 application area is located within the Swan Coastal Plain Interim Biogeographical Regionalisation of Australia (IBRA) bioregion (GIS Database) of which approximately 39.15% of pre-European vegetation remains (Government of Western Australia, 2013).

The vegetation within the application area has been broadly mapped as Beard vegetation associations:

129: Bare areas; drift sand

1007: Shrublands; *Acacia lasiocarpa* & *Melaleuca acerosa* heath/shrublands; *Acacia rostellifera* & *Acacia Cyclops* thicket

Approximately 91.20% of Beard vegetation association 129 and 71.12% of Beard vegetation association 1007 remain within the Swan Coastal Plain bioregion (Government of Western Australia, 2013).

At a local context, a review of aerial photography indicates that there are areas of extensive vegetation located directly east of the application area. The vegetation proposed to be cleared does not appear to form a significant linkage between areas of vegetation (GIS Database)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Government of Western Australia (2013)
GIS Database:
- IBRA WA (Regions - Sub Regions)
- Lancelin Townsite Mar 2011 Mosaic
- Ledge Point 50cm Orthomosaic - Landgate 2008
- 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

There are no watercourses or wetland areas found within the application area (GIS Database).

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology GIS Database:
- Hydrography - Linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Soils within the application area have been mapped as A13 and B24 (GIS Database). Northcote (1960 – 1968) describes A13 as: Coastal dune formations backed by the low-lying deposits of inlets and estuaries: chief soils are calcareous sands on the dunes.

Northcote (1960 – 1968) describes B24 as: Undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites

Due to the largely unvegetated state of the sand dune and the strong coastal winds in the Lancelin area, it is likely that wind erosion is already naturally occurring at the site. This is evident from the moving nature of these sand dunes (Biggs, 2013). Clearing some pockets of vegetation may slightly increase the amount of sand that is exposed to wind erosion, however in the context of the much larger dune system, this increase is not

considered to be significant.

Based on the above the proposed clearing may be at variance to this Principle.

Methodology Biggs (2013)
Northcote (1960 - 1968)
GIS Database:
- 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 application area is not located within any conservation area (GIS Database). The nearest conservation area is Nilgen Nature Reserve, located approximately 3 kilometres north-east of the application area (GIS Database).

Given the distance of the application area from Nilgen Nature Reserve, the proposed clearing is not likely to impact the environmental values of the conservation area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- DEC 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 not likely to be at variance to this Principle

The application area partially intersects the Lancelin Water Reserve, which has been designated a Priority 1 Public Drinking Water Source Area (PDWSA) (GIS Database). The Department of Water has assessed the proposal and has no comments to provide (Department of Water, 2013).

There are no watercourses, wetlands or significant hydrological features located within the application area (GIS Database). This was confirmed by the assessing officer during the site visit conducted on 28 August 2013.

The tenement covers an area of groundwater that is being used for consumption by the Lancelin Townsite (Westdeen, 2011). The operation has been previously assessed by the Department of Water where they reported the mining operations would have no effect on the groundwater (Westdeen, 2011).

Based on the above and the small scale of the clearing, the proposed clearing is not likely to be at variance to this Principle.

Methodology Department of Water (2013)
Westdeen (2011)
GIS Database:
- Hydrography - Linear
- Public Drinking Water Source Areas (PDWSAs)

(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 not likely to be at variance to this Principle

The climate of the Lancelin area is characterised by hot dry summers and cool wet winters, with an average 597.2mm of rain received annually (BoM, 2013). The area under application is located on a coastal dune characterised by sandy soils over aeolianite (Northcote, 1960 – 1968). During rainfall events, water is likely to move through the soil profile rather than flow along the surface or collect and flood.

The clearing of six hectares within an application area of 50 hectares is not considered likely to increase the incidence or severity of flooding.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BoM (2013)
Northcote (1960 - 1968)

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

Comments

There are two Native Title Claims (WC1997/071 and WC2003/006) over the area under application (GIS

Database). These claims have been registered with the National Native Title Tribunal on behalf of the claimant group and filed at the Federal Court of Australia respectively. However, the mining tenure has been granted in accordance with the future act regime of the Native Title Act 1993 and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the Native Title Act 1993.

There is one registered Aboriginal Site of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the Aboriginal Heritage Act 1972 and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation (formerly the Department of Environment and Conservation) and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 1 July 2013 inviting submissions from the public. There were no submissions received.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Registered with the NNTT
- Native Title Claims - Filed at the Federal Court of Australia

4. References

- Biggs (2013) Clearing Application CPS 5650/1 ? Support Document. Unpublished report prepared for Westdeen Holdings Pty Ltd
- BoM (2013) Lancelin Daily Rainfall. Bureau of Meteorology. URL
http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=136&p_display_type=dailyDataFile&p_stn_nm=009114&p_startYear=
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- DEC (2013) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation.
<http://naturemap.dec.wa.gov.au/default.aspx> (date accessed 2 September 2013).
- Department of Water (2013) Advice provided to the Department of Mines and Petroleum for Clearing Permit Application CPS 5650/1 on 14 August 2013.
- 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.
- 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.
- Westdeen (2011) Addendum to Mining Proposal to Continue Mining at Lancelin. Unpublished Report.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
CALM	Department of Conservation and Land Management (now DEC), Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)

IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2** **Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3** **Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4** **Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R** **Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X** **Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2** **Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4** **Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5** **Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)

- EX** **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W)** **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR** **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN** **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU** **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD** **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.