GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 7686/1
File Number: 2017/001203-1
Duration of Permit: From 30 June 2018 to 30 June 2020

PERMIT HOLDER

Dumbleyung Sandbar Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 6727 on Plan 124142, Nairibin

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than seven hectares of native vegetation and 12 native trees within the area hatched yellow on attached Plan 7686/1.

CONDITIONS

1. **Avoid, minimise and reduce the impacts and extent of clearing**
   In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
   (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.

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 in an area that has already been cleared.
   (b) At an *optimal time* 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;
      (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).
   (c) Within 24 months of laying the vegetative material and topsoil on the cleared area 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, *revegetate* the area by 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 ensuring only *local provenance* seeds and propagating material are used.

3. **Records must be kept**
The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:
(a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
(b) the date that the area was cleared;
(c) the size of the area cleared (in hectares);
(d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and
(e) actions taken in relation to revegetation and rehabilitation in accordance with condition 2 of this Permit.

4. **Records must be kept**
(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 of this Permit; and
(ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding calendar year.
(b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
(c) Prior to 31 December 2022 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.

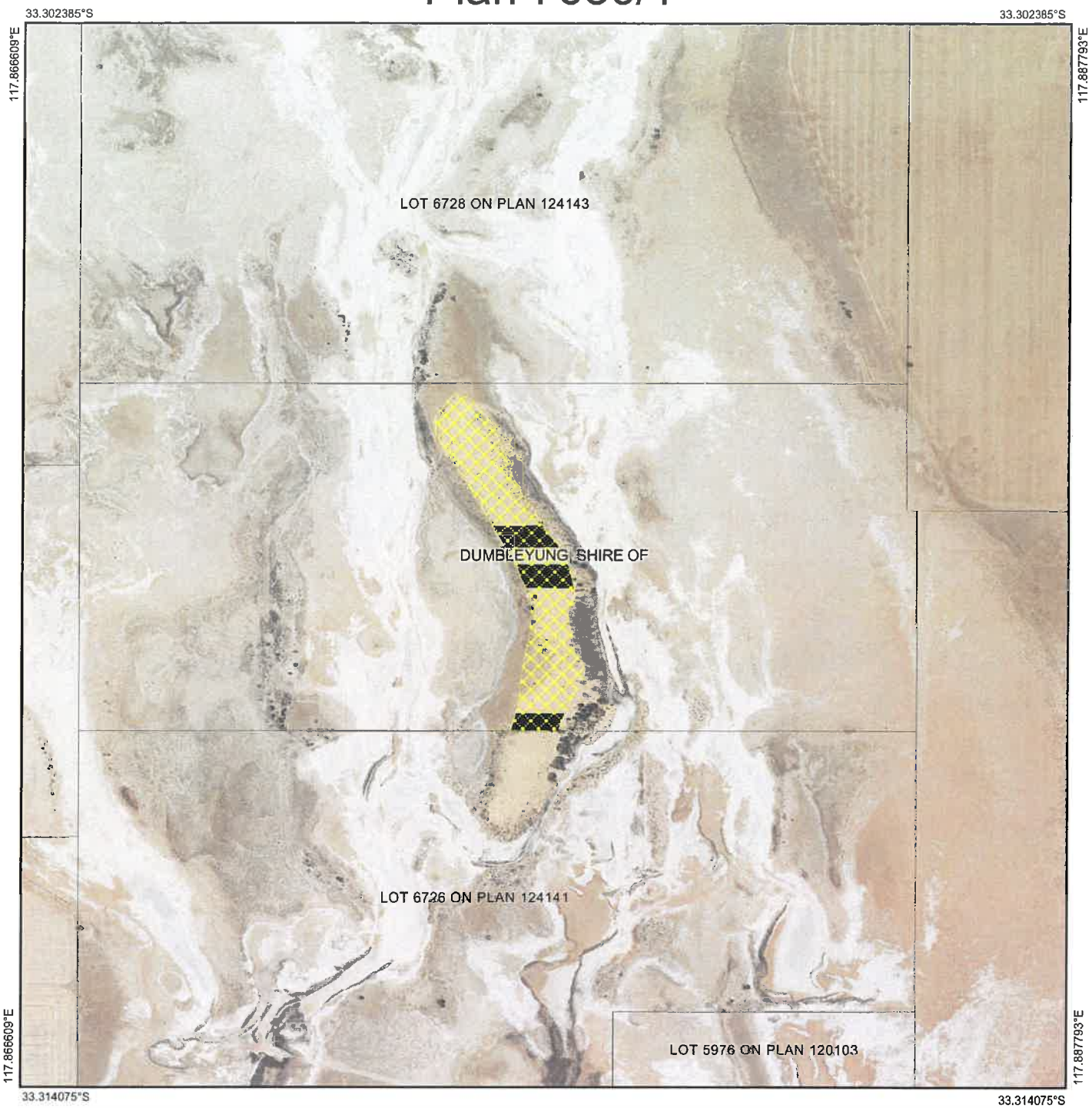
DEFINITIONS
The following meanings are given to terms used in this Permit:
direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;
fill means material used to increase the ground level, or fill a hollow;
local provenance means native vegetation seeds and propagating material from natural sources within 10 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion 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.

Emma Bramwell
A/MANAGER
CLEARING REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

31 May 2018

Plan 7686/1



Legend

- Imagery
- Localities
- Clearing Instruments Activities
- Local Government Authority

N

0 500m

1:10,449

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

E BRAMWELL Date 31/05/18

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

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: CPS 7686/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Dumbleyung Sandbar Pty Ltd

1.3. Property details

Property: LOT 6727 ON PLAN 124142, NAIRIBIN
Local Government Authority: DUMBLEYUNG, SHIRE OF
DWER Region: South Coast
DBCA District: GREAT SOUTHERN
Localities: NAIRIBIN

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7	12	Mechanical Removal	Extractive industry

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 31 May 2018
Reasons for Decision: The clearing permit application was received on 2 August 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to clearing principle (f), may be at varaicne to clearing principle (g), and is not likely to be at variance to the remaing clearing principles.

The Delegated Officer noted that the proposed clearing will impact on vegetation growing in association with a wetland, and may cause wind erosion. In granting a clearing permit for the application subject to conditions, the Delegated Officer determined that the proposed clearing will not lead to any unacceptable environmental impacts.

Site Information

Clearing Description: The application is to clear up to seven hectares of native vegetation and 12 native trees within Lot 6727 on Plan 124142, Nairibin, for the purpose of sand extraction (refer Figure 1).

Vegetation Description: The vegetation within the application area is mapped as Beard vegetation association 1093, described as succulent steppe with open woodland and thicket; *Eucalyptus* species and *Allocasuarina obesa* over teatree and samphire (Shepherd et al, 2001).

Vegetation Condition: The vegetation within the application area is in the following condition:

- Good: vegetation structure significantly altered by very obvious signs of multiple disturbance; retains basic structure or ability to regenerate (Keighery, 1994).
- Degraded: basic vegetation structure severely impacted by disturbance; scope for regeneration but not to a state approaching Good condition without intensive management (Keighery 1994).
- Completely Degraded: the structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery, 1994).

The majority of the vegetation within the application area is in a Degraded (Keighery 1994) condition. The condition and structure of the vegetation within the application area was obtained via a site inspection undertaken by officers of the Department of Water and Environmental Regulation (DWER) on 6 October 2017 (DWER site inspection).

Soil / Landform Type: The application area is mapped within land subsystem 259CB_2, described as saline broad alluvial plains; mainly saline wet soils with small areas of alkaline grey shallow sandy, and less commonly loamy, duplex soils and hard cracking clays (Schoknecht et al., 2004).

Comment: The local area referred to in this assessment is defined as the area within a 10 kilometre radius of the application area.

Figure 1: Map of application area

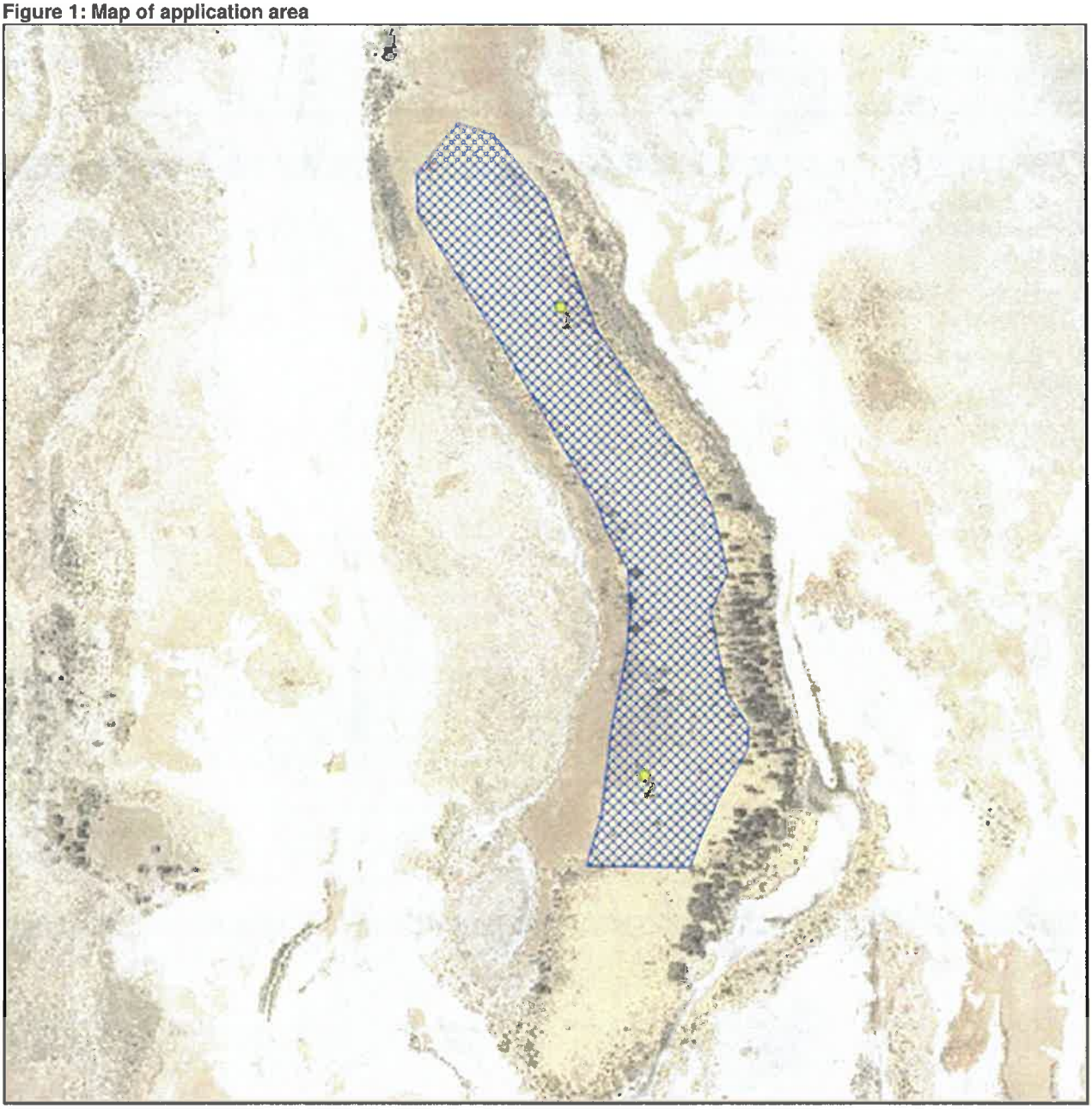


Figure 2: Photographs of vegetation within the application area

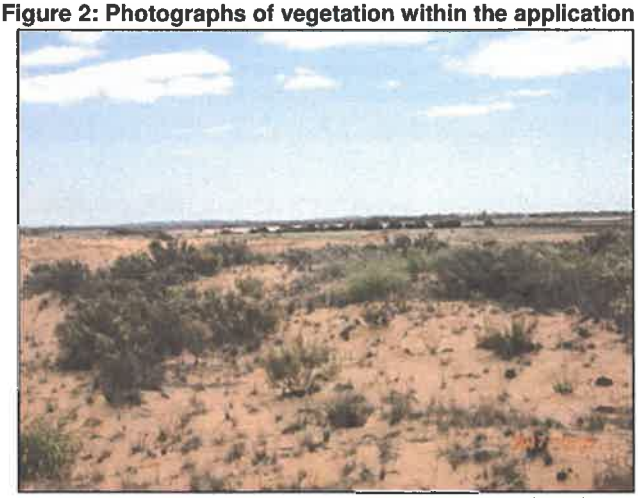


Photo 1 northern portion of the application area, location indicated by green dot in Figure 1 above.

Photo 2: southern portion of the application area, location indicated by green dot in Figure 1 above.

2. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Proposed clearing is not likely to be at variance to this Principle

The vegetation within the application area is comprised predominately of a Myrtaceae scrubland with an overstorey of *Allocasuarina obesa* (swamp sheoak) mainly on the south-eastern side of the application area, and an understorey of *Grevillea* species, *Pericallyma* , *Thryptomene*, *Ptilotus*, *Lepidosperma* and *Acacia* species and native grasses (DWER, 2017). The application area is highly disturbed with areas (as indicated in Figure 2), consisting of bare sands and minimal native vegetation (DWER, 2017).

According to available databases, three priority flora have been recorded within the local area. Of these, Priority 4 species *Bossiaea divaricata* has been recorded within the same vegetation and soil types as found within the application area. Priority 4 flora species are considered to have been adequately surveyed, or for which sufficient knowledge is available, and are considered not currently threatened or in need of special protection, but could be if present circumstances change (Jones, 2015). Noting this and the condition of the majority of the vegetation, the proposed clearing is unlikely to impact on the conservation status of *Bossiaea divaricata* or other priority flora mapped within the local area.

Given the above, the application area is unlikely to comprise a high level of biological diversity. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, four fauna specially protected under the *Wildlife Conservation Act 1950* and one priority fauna have been recorded within the local area (DBCA, 2007-). The DWER site inspection found that the vegetation within the application area has been highly modified, and that the majority of the vegetation is in a Degraded (Keighery, 1994) condition (DWER, 2017). Noting this, the application area is unlikely to comprise significant habitat for indigenous fauna, including species of conservation significance. The proposed clearing is not likely to be at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

According to available databases, no rare flora species have been mapped within the local area. Given this, the application area is not likely to include, or be necessary for the continued existence of, rare flora. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, no threatened ecological communities are mapped within the local area. Given this, the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of, a threatened ecological community. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

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).

As indicated in Table 1, the remaining extents of native vegetation within the bioregion and mapped vegetation association are below the 30 per cent threshold (Government of Western Australia, 2018). The DWER site inspection found that the majority of the vegetation within the application area is in a Degraded (Keighery, 1994) condition and is not representative of the mapped vegetation association (DWER, 2017).

Noting the above, the application area is not likely to be significant as a remnant in an area that has been extensively cleared. The proposed clearing it is not likely to be at variance to this Principle.

Table 1: Vegetation extents

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent in DCBA Managed Lands (ha)	(%)
IBRA Bioregion*					
Avon Wheatbelt	9 517 109	1 763 070	18.5	174 960	10
Beard vegetation association*					
1093	6 848	1 603	23.5	433	27

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is at variance to this Principle

According to available databases, the application occurs within a Geomorphic Wheatbelt Wetland. The wetland is appears to be a part of suite of wetlands that form a large part of the Hardy Estuary Coblinine catchment. A site inspection identified water in low-lying channels either side of the application area (DWER, 2017).

Noting that the application area is mapped within a wetland and the presence of water in the channels adjacent to the application area, it is likely the vegetation within the application area is growing in association with an environment associated with this wetland. The DWER site inspection found that the majority of the vegetation within the application area is in a Degraded (Keighery, 1994) condition (DWER, 2017). Noting this, impacts from the proposed clearing are likely to be minimal.

Given the above, the proposed clearing is at variance to this Principle.

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

Proposed clearing may be at variance to this Principle

The land degradation risk categories that apply to the mapped land subsystem within the application area are (Schoknecht et al., 2004):

- Wind erosion: <3% of map unit has a high to extreme wind erosion risk.
- Water erosion: 10-30% of map unit has a high to extreme water erosion risk
- Salinity: >70-% of map unit has a moderate to high salinity risk or is presently saline
- Subsurface acidification: <3-% of map unit has a high subsurface acidification risk or is presently acid
- Flood : 3-10% of the map unit has a moderate to high flood risk
- Waterlogging: >70-% of map unit has a moderate to very high waterlogging risk.

It is noted above that the wind erosion risk is low. However the DWER site inspection found that the application area sits higher in the landscape exposing the sandy nature of the soils as indicated in Photo 2 (DWER, 2017). Considering this and the sandy nature of the soils, it is likely that the application area is susceptible to wind erosion, and that the proposed clearing will increase this risk. Noting the purpose of the proposed clearing, the risk of wind erosion is likely to be short term and mitigated once the extraction activities commence.

It is noted above that the waterlogging risk is very high. However, this is likely to be attributed to the areas adjacent to the application area. These areas are lower in the landscape and had water laying on the surface, suggesting the soil type is different to the sandy soils within the application area (DWER, 2017). Noting this, the risk of waterlogging from the proposed clearing is unlikely.

Given the above, the proposed clearing may be at variance to this Principle in the form of wind erosion.

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available datasets, the local area contains three conservation areas, with the closest being an unnamed nature reserve approximately 1.7km south west of the application area. The nature reserve is separated from the application area by farmland and tracks. Noting this, the proposed clearing is not likely to have an impact on the environmental values of any nearby conservation areas. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

As discussed under Principle (f), the application area occurs within a Geomorphic Wheatbelt Wetland. The DWER site inspection identified that the application area is located higher in the landscape than surrounding areas, contains sandy soils, and contains vegetation that has been highly modified (DWER, 2017). Considering this, the proposed clearing is not likely to cause deterioration in the quality of surface water.

Groundwater salinity in the area is mapped as greater than 35,000 milligrams per litre total dissolved solids, which is considered to be highly saline. Given the existing level of salinity, the proposed clearing is not likely to cause deterioration in quality of underground water.

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

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Proposed clearing is not likely to be at variance to this Principle

The DWER site inspection identified that the application area is located higher in the landscape than surrounding areas, and contains sandy soils. As discussed under principle (g), the mapped land subsystem within the area under application has a 3-10 per cent moderate to high flood risk (Schoknecht et al., 2004). Given this, the proposed clearing is not likely to be at variance to this Principle.

3. Planning instruments and other relevant matters.

The Shire of Dumbleyung advised that under its Town Planning Scheme No1. (TPS 1) the subject property is zoned 'Rural Regional' (Shire of Dumbleyung, 2017). In accordance with the TPS 1 the applicant will require development approval and an extractive industry licence (Shire of Dumbleyung, 2017).

The applicant has received Development Approval and an Extractive Industry licence from the Shire Dumbleyung subject to a number of conditions (Dumbleyung Sandbar Pty Ltd, 2018).

The application was advertised on the Department of Water and Environmental Regulation's website on 2 August 2017 for a 21 day submission period. No submissions were received during this period.

No registered Aboriginal Sites of Significance occur within the application area.

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Department of Biodiversity Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed October 2017

Department of Water and Environmental Regulation (DWER) (2017) Site Inspection Report for Clearing Permit Application CPS 7686/1, Dumbleyung Sandbar Pty Ltd. Site inspection undertaken 6 October 2017. Department of Water and Environmental Regulation, Western Australia (DWER Ref:A1573557).

Dumbleyung Sandbar Pty Ltd (2018). Copies of the Development Approval and Extractive Industry Licence issued to Dumbleyung Sandbar Pty Ltd. (DWER Ref:A1679620).

Government of Western Australia (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Parks and Wildlife, Perth.

Jones, A. (2015) Threatened and Priority Flora List, 11 November 2015. Department of Parks and Wildlife: Kensington, WA.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Dumbleyung (2017) Advice received in relation to Clearing Permit Application CPS 7686/1 - Dumbleyung Sandbar Pty Ltd (DWER Ref:A1573568).

GIS Databases:

- Aboriginal Sites of Significance
- DBCA Estate
- Groundwater salinity
- Hydrography, linear
- Remnant vegetation
- SAC bio datasets (accessed May 2018)
- Soils, Statewide
- Topographic contours