



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6865/2  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Shalinden Pty Ltd

### 1.3. Property details

Mining Lease 74/49  
Mining Lease 74/61  
Local Government Area: Shire of Esperance  
Colloquial name: Lake Tay Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
52.5		Mechanical Removal	Mineral Production

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 3 October 2019

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 125: Bare areas; salt lakes; and 521: Medium woodland: salmon gum and red mallee (GIS Database).

A flora and vegetation survey was conducted over the application area by Enviro Works Consulting during October, 2018. The following vegetation associations were recorded within the application area (Enviro Works Consulting, 2019):

1. A low open woodland of *Callitris columellaris*, *Casuarina obesa* and *Eucalyptus spreta* over open to dense heathland and scrubland of *Scaevola spinescens*, *Comesperma volubile*, *Hibbertia inclusa*, *Maireana erioclada*, *Alyxia buxifolia*, *Darwinia* sp. Karonie (K. Newbey 8503), *Melaleuca brevifolia*, *Melaleuca hamulosa*, *Calytrix tetragona*, *Alyxia buxifolia* and *Billardiera lehmanniana* over an open herbland of annual and soft perennial species including *Zygophyllum aurantiacum* subsp. *aurantiacum*, *Disphyma crassifolium*, *Kippistia suaedifolia*, *Crassula colorata*, *Asteridia chaetopoda* and *Dianella brevicaulis*. This community occurs on slopes and crests of low and tall gypsum dunes.
2. An open low to dwarf shrubland to 0.4 metres of *Frankenia cinerea*, *Tecticornia moniliformis*, *Lawrencia squamata*, *Maireana oppositifolia*, *Tecticornia halocnemoides* and *Disphyma crassifolium* over an annual ground flora of herbs and daisies (e.g. *Isotoma scapigera*, *Kippistia suaedifolia*). This community occurs on low lying saline flat areas of grey and white sands which are seasonally inundated or saturated.

**Clearing Description** Lake Tay Project. Shalinden Pty Ltd proposes to clear up to 52.5 hectares of native vegetation within a boundary of approximately 52.5 hectares, for the purpose of gypsum extraction activities. The project is located approximately 140 kilometres northwest of Esperance, within the Shire of Esperance.

**Vegetation Condition** Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

**Comment** The vegetation condition was derived from a vegetation survey conducted by Enviroworks Consulting (2019).

The amendment is to increase the clearing area by 37.2 hectares, comprising 7.2 hectares on Mining Lease 74/49, and 30 hectares on Mining Lease 74/61.

Clearing permit CPS 6865/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 28 January 2016 and was valid from 20 February 2016 to 20 February 2021. The permit authorised the clearing of up to 15.3 hectares of native vegetation within a boundary of approximately 15.3 hectares, for the purpose of gypsum mining.

On 22 July 2019, the Permit Holder applied to amend CPS 6865/1 to increase the amount of clearing authorised by 37.2 hectares; increase the permit boundary by 37.2 hectares and extend the permit duration to 19 February 2026.

### 3. Assessment of application against Clearing Principles

**Comments** Shalinden Pty Ltd has applied to amend the permit to increase the amount of authorised clearing by 37.2 hectares, increase the permit boundary to 52.5 hectares, and increase the duration of the permit by 5 years. These changes to the permit are to allow for the expansion of the gypsum extraction project.

The permit area is located within the Eastern Mallee sub-region of the Interim Biogeographic Regionalisation of Australia (IBRA) Mallee bioregion (GIS Database). The Eastern Mallee sub-region is comprised of duplex soils of calcareous clays and loams; white and yellow sandplains; and loamy plains with numerous salt-pans. The vegetation is characterised by Mallee on sandplains; samphire around small salt lakes; mallee and patches of woodland on clay; scrub heath on sandstone; and Mallee with boree (*Melaleuca pauperiflora*) on calcareous clay and loam (CALM, 2002).

The amendment areas are broadly mapped as Beard Vegetation association 125 and 521, which is consistent with the original application area (GIS Database). Over 90% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and sub-regional level. Therefore, the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared (Government of Western Australia, 2019).

Enviroworks Consulting conducted a flora survey over the amendment application areas and surrounding areas during October 2018. The survey recorded 72 flora species, from 53 genera and 29 families (Enviroworks, 2019). There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (Enviroworks, 2019). The flora survey recorded two Priority flora species: *Austrostipa geoffreyi* (Priority 1) and *Persoonia scabra* (Priority 3) (Enviroworks, 2019).

In excess of 56,000 plants of *Austrostipa geoffreyi* were estimated to occur within the broader survey area, with approximately 6,980 individual plants located within the amendment application areas (Enviroworks, 2019). According to Florabase records, *Austrostipa geoffreyi* has been recorded from the Eastern Murchison and the Western Murchison sub-regions (Western Australian Herbarium, 1998-2019). Enviroworks (2019) report that, *Austrostipa geoffreyi* occur sporadically on the small rises and fringing playas in surrounding areas. Regionally, the proposed clearing is estimated to represent less than one percent of the known population of *Austrostipa geoffreyi*, therefore, the proposed clearing is unlikely to be a significant threat to the conservation status of this species (Enviroworks, 2019).

*Persoonia scabra* (Priority 3) occurs on low dunes, and in lower numbers on slopes and crests of taller dunes (Enviroworks, 2019). It is estimated that 655 *Persoonia scabra* plants occur within the broader survey area, with approximately 228 individual plants occurring within the amendment application areas (Enviroworks, 2019). Records indicate that this species occurs in a range of soil and landscape types across the Shire of Esperance; therefore, regionally the proposed clearing does not represent a significant threat to this species (Enviroworks, 2019).

The proposal is located at Lake Tay, a non-perennial internally draining lake (GIS Database). The application area supports vegetation growing in association with Lake Tay (Enviroworks, 2019). Within the survey area dune slopes may provide nesting opportunities for Rainbow Bee Eaters (*Merops ornatus*) and salt lakes may provide seasonal fauna habitat for wading birds (Enviroworks, 2019). However, as most fauna species require vegetation and leaf litter for shelter, and the general survey area contained 80% bare ground with sparse vegetation, the application area is unlikely to be preferred habitat for fauna species (Enviroworks, 2019).

Given the above, the amendment area is unlikely to represent an area of higher biodiversity than the original permit area or surrounding area.

There are no known records of Threatened or Priority Ecological Communities located within or in close proximity to the application area, and none were recorded during the survey (Enviroworks, 2019; GIS Database).

The application area does not lie within or in close proximity to any conservation areas (GIS Database).

Weeds have the potential to out-compete native vegetation and reduce biodiversity. Continued implementation of the existing weed management condition may minimise the risk of spread of weeds into the area.

The vegetation associations, habitat types and landforms found within the amendment area are similar to the original permit area, and are well represented in surrounding areas (Enviroworks, 2019; GIS Database). The additional 37.2 hectares of proposed clearing is unlikely to have any significant additional impacts.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 6865/1.

**Methodology** Enviroworks (2019)  
Western Australian Herbarium (1998-2019)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

## Planning Instrument, Native Title, previous EPA decision or other matter.

### Comments

There is one native title claim (W1996/064) over the area under application (DPLH, 2019). This claim has been determined by the Federal Court on behalf of the claimant groups. 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 are no registered Aboriginal Sites of Significance within the application area (DPLH, 2019). 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 Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, 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 amendment application was advertised on 5 August 2019 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

**Methodology** DPLH (2019)

## 4. References

- DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 26 August 2019).
- Enviroworks (2019) Flora Survey and Fauna Habitat Assessment, Proposed Gypsum Mine, Lake Tay, Report prepared for Shalinden Pty Ltd, by Enviro Works, June 2019
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Western Australian Herbarium (1998-2019) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 29 August 2019).

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia (now DPLH)
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia (now DPIRD)
<b>DBCA</b>	Department of Biodiversity, Conservation and Attractions, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
<b>DoEE</b>	Department of the Environment and Energy, Australian Government
<b>DER</b>	Department of Environment Regulation, Western Australia (now DWER)
<b>DMIRS</b>	Department of Mines, Industry Regulation and Safety, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia (now DMIRS)
<b>DPIRD</b>	Department of Primary Industries and Regional Development, Western Australia
<b>DPLH</b>	Department of Planning, Lands and Heritage, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DoE</b>	Department of the Environment, Australian Government (now DoEE)

<b>DoW</b>	Department of Water, Western Australia (now DWER)
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia (now DBCA)
<b>DSEWPac</b>	Department of Sustainability, Environment, Water, Population and Communities (now DoEE)
<b>DWER</b>	Department of Water and Environmental Regulation, Western Australia
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

## **Definitions:**

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

### **T            Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of ‘Specially Protected Fauna’ listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of ‘Rare Flora’ listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

### **CR            Critically endangered species**

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

### **EN            Endangered species**

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

### **VU            Vulnerable species**

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

## **Extinct Species:**

### **EX            Extinct species**

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

**EW****Extinct in the wild species**

Species that “is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

**Specially protected species:**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

**MI****Migratory species**

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**CD****Species of special conservation interest (conservation dependent fauna)**

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**OS****Other specially protected species**

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**P****Priority species:**

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

**P1****Priority One - Poorly-known species**

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

- P2 Priority Two - Poorly-known species**  
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
- P3 Priority Three - Poorly-known species**  
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
- P4 Priority Four - Rare, Near Threatened and other species in need of monitoring**  
(a) Rare. Species that 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. These species are usually represented on conservation lands.  
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.  
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**Principles for clearing native vegetation:**

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare 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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.