



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5955/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Phillip and Craig Bywaters**

1.3. Property details

Property:

- Mining Lease 70/1079
- Mining Lease 70/1114
- Mining Lease 70/1115
- Mining Lease 70/1118
- Mining Lease 70/1191
- Mining Lease 70/1255
- Mining Lease 70/1256
- Mining Lease 70/1257
- Mining Lease 70/1258
- Mining Lease 70/1259
- Mining Lease 70/1272
- Mining Lease 70/1312
- General Purpose Lease 70/200
- Miscellaneous Licence 70/72
- Miscellaneous Licence 70/84
- Miscellaneous Licence 70/141

Local Government Area: Shire of Dalwallinu
Colloquial name: Lake Goorly Gypsum Operation

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 December 2015

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 and are useful to look at vegetation in a regional context. The following Beard vegetation associations are located within the application area (GIS Database):

125: Bare areas; salt lakes; and
676: Succulent steppe; samphire.

Three flora and vegetation surveys have been conducted over the application area. The first was conducted for Mining Leases 70/1118, 70/1191 and 70/1256 by Ian Fordyce and Associates (Fordyce) on 11 November 2009 (Fordyce, 2010). The second survey was conducted for all the Lake Goorly tenements, focusing on areas of proposed disturbance and was conducted between 24 and 26 March 2011 (Fordyce, 2011). The third survey was conducted over Mining Lease 70/1312 by Newland Environmental Pty Ltd (Newland) on 29 October 2013 (Newland, 2013a). The following eight vegetation units have been identified within the application area (Newland, 2013b):

Lake Floor

1. Simple samphire open shrubland, generally 20 – 30 centimetres tall. Cover is irregular – some parts are almost entirely bare; on most of the sandy (gypsiferous) section, cover varies from <1% to 15% but is usually <10%. Almost all the samphire is a distinctive bluish grey variety (*Tecticornia loriae*).

Lake Margin

2. Lake-floor samphire, as described under the first vegetation unit above. An almost monotypic shrubland/herbland of *Tecticornia loriae* on pale yellow silt, clay and fine-grained sand.

3. Lake floor samphire - Low scattered shrubs of *Tecticornia disarticulata* (0.5 metres by 2%) with *Frankenia cinerea* (0.2 metres by 1%) on lake floor.
4. Sheoak (*Casuarina obesa*) open woodland on tall dunes of pale pinkish brown, gypsiferous sand.
5. Abandoned and partially rehabilitated mining pits, where the gypsum sand has already been removed. The floor is a distinctive white, sandy clay.
6. Bare (or almost bare) pale sand dunes - grassy with scattered trees. This unit includes the pale yellow and pale brown gypsum dunes where future mining is planned.
7. Mallee saltbush (*Atriplex stipitata*) with scattered trees on a single, low, arcuate dune near the northwestern end of the tenement area. The substrate here is a distinctive reddish yellow, medium to coarse-grained, well-sorted, quartz sand.
8. Grassy dunes with scattered trees - very open tussock grassland of *Austrostipa eremophila* (glabrous form) (0.3 metres by 2%) with scattered low trees of mixed *Acacia* spp. (3-4 metres) on gypsum sand dune.

Clearing Description	Lake Goorly Gypsum Operation. Phillip John Bywaters and Craig Anthony Bywaters (Bywaters) proposes to clear up to 84.47 hectares of native vegetation within a total boundary of approximately 935 hectares, for the purpose of gypsum mining on Lake Goorly. The project is located approximately 30 kilometres north east of Wubin, in the Shire of Dalwallinu.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	The proposed footprint includes an ongoing mining disturbance of approximately 15 hectares per annum (totals 75 hectares over five years), 1.75 hectares for processing and stockpiling and 7.72 hectares for road development (Newland, 2013b). The gypsum resource occurs in shallow deposits across areas of the lake floor at depths of between 0.3 and 1 metre and from a raised dune deposit on the lake margin (Newland, 2013b). Vegetation condition is based on the flora and vegetation surveys undertaken and aerial imagery (GIS Database). Clearing permit CPS 5955/1 was granted by the Department of Mines and Petroleum on 27 March 2014 and authorised the clearing of 84.47 hectares of native vegetation within a boundary of approximately 971.6 hectares. The purpose of the original permit was to cover all clearing for the project under one permit and replace all previous permits at the location.

3. Assessment of application against clearing principles

Comments

The permit holder has applied to amend clearing permit CPS 5955/1 to amend the permit boundary and change the annual reporting date from 31 July to 31 August. The permit boundary change is a result of a survey of the mining tenements identifying a change in their spatial representation. The proposed changes have resulted in the permit boundary being reduced from 971.6 hectares to 935 hectares. Approximately 22.5 hectares of the amended permit boundary was not within the original permit boundary. The amount of clearing authorised will remain the same.

The environment within the additional areas is similar to that of the original permit boundary. There are no records of Threatened flora or fauna within the additional areas (GIS Database; Newland, 2013b). No Threatened or Priority Ecological Communities have been identified within the additional areas (GIS Database; Newland, 2013b). The Priority 1 flora species *Acacia inaeana* subsp. *latifolia* has been recorded in proximity to the permit boundary (Fordyce, 2011). A 50 metre buffer was established for the original permit boundary. This buffer has been maintained for the proposed amended boundary.

The proposed amendment is not likely to have a significant environmental impact and the assessment of the clearing principles is consistent with the assessment contained in decision report CPS 5955/1.

Methodology	Fordyce (2011) Newland (2013b) GIS Database: - Threatened and Priority Flora - Threatened Ecological Sites Buffered - Threatened Fauna
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Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There is one native title claim over the area under application: WC1997/072 (Department of Aboriginal Affairs, 2015). This claim has been registered with the Native Title Tribunal 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*.

According to available databases, 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, the Department of Parks and Wildlife 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 12 October 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology Department of Aboriginal Affairs (2015)
GIS Database:
- Aboriginal Sites Register System

4. References

- Department of Aboriginal Affairs (2015) Aboriginal Heritage Inquiry System. Accessed on 10 November 2015.
- Fordyce (2010) Flora and Vegetation Survey of a Gypsum Deposit in Lake Goorly, Dalwallinu Shire, M70/1118, M70/1191, M70/1256. Unpublished report dated 15 January 2010.
- Fordyce (2011) Vegetation and Flora Survey of Lake Goorly, particularly areas of proposed disturbance with gypsum mining operations on M70/1079, 1114, 1115, 1118, 1191, 1255, 1256, 1257, 1258, 1259, 1272, and E70/3099, and associated special-purpose tenements. Unpublished report dated 5 April 2011.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Newland (2013a) Lake Goorly Gypsum Operation Flora and Vegetation Survey of M70/1312. Unpublished report prepared by Newland Environmental Pty Ltd for Bywaters Gypsum Supplies. Dated November 2013.
- Newland (2013b) Supporting Information for a Native Vegetation Clearing Permit Application Purpose Permit Lake Goorly Gypsum Operation. Unpublished report prepared by Newland Environmental Pty Ltd for Bywaters Gypsum Supplies. Dated December 2013.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
s.17	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

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Threatened species:

Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially

protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:

CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.

EN: Endangered - considered to be facing a very high risk of extinction in the wild.

VU: Vulnerable - considered to be facing a high risk of extinction in the wild.

- X Presumed Extinct species:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA Migratory birds protected under an international agreement:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S Other specially protected fauna:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1 Priority One - Poorly-known species:**
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2 Priority Two - Poorly-known species:**
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
- P3 Priority Three - Poorly-known species:**
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.
- 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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
 - (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.
- P5 Priority Five - Conservation Dependent species:**
Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

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.

