



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3745/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Phillip and Craig Bywaters

1.3. Property details

Property: Mining Lease 70/1191
Local Government Area: Shire of Dalwallinu
Colloquial name: N/A

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 December 2012

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
<p>Beard Vegetation Associations have been mapped for the whole of Western Australia. One Beard Vegetation Association is located within the application area (Government of Western Australia, 2011):</p> <ul style="list-style-type: none"> 676: succulent steppe; Samphire. <p>Dr Ian Fordyce conducted a flora and vegetation survey over three Mining Leases, including Mining Lease 70/1191, in November 2009. Fordyce (2010) describes the vegetation as follows:</p> <p><i>On the lake, the vegetation is 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) with minor Maireana oppositifolia and Atriplex holocarpa.</i></p>	<p>Phillip and Craig Bywaters (Bywaters) propose to clear up to 60 hectares of native vegetation. The proposed clearing is located approximately 30 kilometres north-east of Wubin (GIS Database).</p> <p>The purpose of the proposed clearing is gypsum mining within the Lake Goorly salt lake system, a lake in excess of 12,000 hectares within the northern wheatbelt region (Newlands Environmental, 2011; GIS Database).</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).</p>	<p>The vegetation condition rating was derived from a flora and vegetation survey conducted by Dr Ian Fordyce in November 2009.</p> <p>Lake Goorly and surrounding areas have been historically used for agricultural and mining purposes (DEC, 2008). Previous gypsum mining activity has resulted in disturbance and modification of sections of Lake Goorly (DEC, 2008).</p> <p>Bywaters applied to the Department of Mines and Petroleum on 23 October 2012 to amend CPS 3745/1 to increase the amount proposed to be cleared and the clearing permit boundary.</p>

3. Assessment of application against clearing principles

Comments

Phillip and Craig Bywaters (Bywaters) have applied to increase the amount of clearing authorised from 20 hectares to 60 hectares (i.e. an increase of 40 hectares) and to increase the permit boundary from 20 hectares to 235.2 hectares (i.e. an increase of 215.2 hectares). The additional 40 hectares of proposed clearing is for the continuation of gypsum extraction. The proposed permit boundary covers the entirety of Mining Lease 70/1191.

A flora and vegetation survey was undertaken over Mining Lease 70/1191 in November 2009 and this included both the original and proposed amended applications areas (Fordyce, 2010). The vegetation type in the additional area appears to be

identical to that found in the original application area (Fordyce, 2010). There were no weed species recorded during the flora survey (Fordyce, 2010). Care must be taken to ensure that the proposed clearing activities do not spread or introduce weed species to non-infested areas. The original clearing permit (CPS 3745/1) contained a weed management condition to address this.

No Threatened or Priority Ecological Communities and no Threatened or Priority Flora were recorded within the additional area (Fordyce, 2010; GIS Database).

The proposed clearing is not likely to be at variance with Principles (a), (c) and (d).

The fauna habitats present within the amended application area are consistent with those described in clearing permit decision report 3745/1. Therefore, the proposed clearing is not likely to be at variance with Principle (b).

The assessment of Principle (e) is consistent with the assessment in clearing permit decision report CPS 3745/1. Therefore the proposed clearing is at variance to this Principle. The proponent has advised that the site will be progressively rehabilitated following the completion of mining operations (Newlands Environmental, 2011). A site visit by Department of Mines and Petroleum staff in 2008 reported that previously mined areas had been rehabilitated successfully. This has been supported by photographs demonstrating successful rehabilitation of disturbed areas (Newlands Environmental, 2011). Based on the above commitment and demonstrated ability to successfully implement rehabilitation, vegetation loss resulting from mining activity is likely to be temporary.

The proposal is for the clearing of 60 hectares of native vegetation on Lake Goorly, an extensive salt lake system within the northern Wheatbelt region (GIS Database). Based on the above, the proposed clearing is at variance with this Principle (f). The vegetation present within the application area is representative of a Samphire/Chenopod shrubland which is typical of that associated with salt lake systems throughout the Wheatbelt (CALM, 2002). The area proposed for disturbance is not subject to inundation or waterlogging and mining activities will be restricted to dry periods only (Newlands Environmental, pers. comm., November 2012). Newlands Environmental (2011) has advised that the areas to be mined will average between five to fifteen hectares per year and will be progressively rehabilitated following the completion of mining activities to ensure the ecological values of the site are restored. Photos provided by Newlands Environmental (2011) have shown where previously mined areas have been successfully rehabilitated. Although the proposal is at variance with this principle, the vegetation proposed to be cleared is typical of that associated with salt lake systems throughout the Wheatbelt and is not considered to have significant environmental value. A staged clearing condition is recommended to minimise the risk of removing riparian vegetation on soil erosion and water quality.

Current environmental information and information provided by the proponent (Newlands Environmental, 2011; GIS Database) has been reviewed and the assessment of Clearing Principles (g), (h), (i) and (j) is consistent with the assessment in Clearing Permit Decision Report CPS 3745/1.

Methodology

CALM (2002)
Fordyce (2010)
Newlands Environmental (2011)
GIS Database
- DEC Tenure
- Public Drinking Water Source Areas (PDWSAs)
- Threatened Ecological Sites
- Threatened Fauna
- Threatened and Priority Flora

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

Comments

There is one native title claim (WC97/72) over the area under application. This claim has been registered with the National Native Title Tribunal in behalf of the claimant group. 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 the 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 (site ID: 24380) 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 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 by the Department of Mines and Petroleum on 12 November 2012, inviting submissions from the public. One submission was received requesting the engagement of monitors at the commencement of clearance works. This request has been forwarded to the proponent.

Methodology

GIS Database
- Aboriginal Sites of Significance
- Native Title Claims – Registered with NNTT

4. References

- CALM (2002) Biodiversity Audit of Western Australia's 53 Biogeographical Subregions (Ancient Drainage subregion).
DEC (2008) Resource Condition Report for a Significant Western Australian Wetland: Lake Goorly. Department of Conservation and Land Management, Western Australia.
Fordyce, I. (2010) Flora and vegetation survey of a gypsum deposit in Lake Goorly, Dalwallinu Shire, M70/1118, M70/1191, M70/1256. Unpublished report. Yarra Yarra Catchment Management Group, Western Australia.

Government of Western Australia (2011) 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.

Newlands Environmental (2011), *Mining Proposal for the Continuation of Gypsum Mining at Lake Goorly on M70/1118, M70/1191, M70/1256 and L70/72*, Unpublished Report prepared on behalf of Bywaters Gypsum Supplies August 2011, Western Australia.

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.

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.

