

Clearing Permit Decision Report

1. Application details

Permit application details

Permit application No.: 4705/4

Permit type: Purpose Permit

Proponent details

Proponent's name: **Regan Scott Grant**

Property details

Property: **Local Government Area:** Mining Lease 70/1285 Shire of Lake Grace

1.4. Application

Colloquial name:

Clearing Area (ha) No. Trees **Method of Clearing** For the purpose of: Mechanical Removal Gypsum Mining

Decision on application

Decision on Permit Application: Grant

Decision Date: 17 October 2013

2. Site Information

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. The majority of the application area is mapped as Beard vegetation association 125: Bare areas; salt lakes. The remaining portion of the application area is mapped as Beard vegetation

association 519: Shrublands; mallee scrub, Eucalyptus eremophila (Government of Western Australia, 2013; GIS Database)

A flora survey of the application area and its surrounds was undertaken on 20, 21 and 29 October 2009 (Rick, 2010). Three 10 metre x 10 metre quadrats and nine sites were sampled to assist with vegetation mapping and the flora survey. The flora survey identified four vegetation types and two of these occur within the application area:

Te - Tecticornia (Samphire) scrub/heath; and

Td - Tecticornia (Samphire) - Scrub/ heath degraded (Rick, 2010).

Clearing Description

Regan Scott Grant. Regan Scott Grant proposed to clear up to 70 hectares of native vegetation, within a total boundary of approximately 83 hectares, for the purpose of gypsum mining.

The proposed clearing is located at Lake Cobham approximately 55 kilometres from the town of Newdegate.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994);

To:

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

Comment

The gypsum is for use in the agricultural industry. It will be extracted using a 25 tonne excavator, stockpiled and loaded onto trucks.

The vegetation condition was assessed during a flora survey of the application area conducted by Rick (2010).

An application for an amendment to clearing permit CPS 4705/1 was submitted by Regan Scott Grant on 15 June 2012 to increase the amount of clearing from 8.5 hectares to 30 hectares and modify the boundary of the application area. The amendment application CPS 4705/2 was approved by the Department of Mines and Petroleum on 6 September 2012. On 7 February 2013, Regan Scott Grant applied to amend CPS 4705/2 for the purpose of changing a permit condition. This amendment was granted on 28 March 2013.

An application for an amendment to clearing permit CPS 4705/3 was received on 22 July 2013. The purpose of the amendment application is to increase the amount of clearing authorised from 30 hectares to 70 hectares, increase the clearing permit boundary and extend the duration of the permit.

3. Assessment of application against clearing principles

Comments

Regan Scott Grant has applied to amend CPS 4705/3 for the purposes of increasing the amount of clearing from 30 hectares to 70 hectares, increase the clearing permit boundary and extend the duration of the permit.

A flora survey of the application area and its surrounds was undertaken on 20, 21 and 29 October 2009 (Rick, 2010). The vegetation types mapped in the additional area applied for in amendment CPS 4705/4 are the same as those mapped within the existing permit boundary (Rick, 2010). The Tecticornia scrub/heath vegetation associations recorded at Lake Cobham are extensive throughout the Lake Magenta salt lake chain and large areas of salt lake vegetation are conserved in the Lake Magenta Nature Reserve (Rick, 2010). No vegetation communities recorded are considered to be Threatened or Priority Ecological Communities and no Threatened Flora were recorded within the additional area (Rick, 2010). Therefore, the proposed clearing is not likely to be at variance to Principles (a), (c) and (d).

The Priority 1 flora species *Frankenia sp.* southern gypsum (M.N. Lyons 2864) was recorded at most sites and quadrats sampled on the lake bed (GIS Database; Rick, 2010). Rick (2010) identifies, however, that this species has also been recorded at 13 out of 25 (10 metre x 10 metre) quadrats sampled in the Lake Magenta Lake chain including Lake Burkett, Lake Lockhart and Lake Magenta. The proposed mining is unlikely to impact on the conservation status of this species. *Frankenia sp.* southern gypsum (M.N. Lyons 2864) was also identified within Lake Cobham regenerating following past mining operations (Rick, 2010).

The fauna habitats present within the application area are consistent with those described in Clearing Permit Decision Report CPS 4705/2. Therefore, the proposed clearing is not likely to be at variance to Principle (b).

The application area is located within Lake Cobham which is a non perennial salt lake (GIS Database) and the vegetation to be cleared consists of predominantly salt tolerant species. The application area is flat with no change in topography and is also located in an area where the average annual evaporation rate (1,900 millimetres) greatly exceeds the local annual rainfall (400 millimetres) (GIS Database). Although the land systems are considered to be stable, the proposed increase in clearing is relatively large (30 hectares to 70 hectares). Rehabilitation is progressive with each area levelled off and top soil returned as soon as possible following completion of mining, minimising the long term impact of land degradation (Grant, 2011). However, in the short term there is a risk of wind and water erosion if any susceptible areas are left cleared and bare for long periods of time. Potential impacts from erosion may be minimised by the implementation of a staged clearing condition.

Current environmental information has been reviewed and the assessment of clearing principles (e), (f), (h), (i) and (j) is consistent with the assessment in Clearing Permit Decision Report CPS 4705/2 (GIS Database).

Methodology

Grant (2011)

Rick (2010) GIS Database:

- DEC Tenure
- Evaporation Isopleths
- Groundwater Salinity
- Hydrographic Catchments Catchments
- Hydrography, Linear
- IBRA WA (Regions Subregions)
- Newdegate Orthomosaic Landgate 2008
- Pre-European Vegetation
- Public Drinking Water Source Areas (PDWSAs)
- Rainfall, Mean Annual
- Soils, Statewide
- Threatened and Priority Flora List
- Threatened Ecological Sites Buffered

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

Comments

There are three Native Title Claims (WC96/109, WC98/70 and WC03/6) over the area under application (GIS Database). WC96/109 and WC98/70 have been registered with the National Native Title Tribunal on behalf of the claimant group and WC03/6 has been filed at the Federal Court of Australia. 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 (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.

CPS 4705/4 was advertised on 12 August 2013 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology GIS Database:

- Aboriginal Sites of Significance
- Native Title Claims Determined by the Federal Court
- Native Title Claims Filed at the Federal Court
- Native Title Claims Registered with the NNTT

4. References

Grant (2011) Information for Clearing Permit Application Purpose Permit. Report Prepared by Regan Scott Grant, October 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.

Rick (2010) Lake Cobham - Proposed Gypsum Mine, Vegetation and Flora Survey 2010. Botanical Consultants report for Regan Grant by Anne (Coates) Rick.

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

DolR 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.

- 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 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 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 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.
- 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.