



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6439/3

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Norwest Sand and Gravel Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 47/543

Local Government Area: City of Karratha

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
20		Mechanical Removal	Laydown area, stockpiles, weighbridge, workshop, office, toilet and crib facilities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 13 February 2020

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 association: 157: Hummock grasslands, grass steppe; hard spinifex, *Triodia wiseana* (GIS Database).

A flora and vegetation survey was conducted over approximately 40 hectares of Miscellaneous Licence 47/543 by West Ecology in July 2012 (West Ecology, 2012). The survey covered all of the existing clearing permit area and the majority of the amendment application area. A narrow strip along the southern edge of the amendment area was not covered by the survey. The following two vegetation associations were recorded within the existing permit area. Vegetation Type 1 represented the majority of the existing permit area (CPS 6439/2) and all of the current amendment application area (CPS 6439/3) (West Ecology, 2012):

Vegetation Type 1: *Acacia bivenosa* open shrubland over *Triodia epactia* and *Triodia wiseana* hummock grassland on low rolling hills; and

Vegetation Type 3: *Acacia colei* var. *colei* high shrubland over *Triodia epactia* and *Triodia wiseana* hummock grassland and *Cenchrus ciliaris* open tussock grassland in drainage lines.

Clearing Description Norwest Sand and Gravel Pty Ltd proposes to clear up to 20 hectares of native vegetation within a boundary of approximately 46 hectares, for the purpose of mining related infrastructure. The project is located approximately 35 kilometres northwest of Karratha, within the City of Karratha.

Vegetation Condition Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

To:

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment The vegetation condition was derived from a vegetation survey conducted by West Ecology (2012). The vegetation of the majority of the survey area was considered to be in good condition (West Ecology, 2012).

Clearing permit CPS 6439/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 5 March 2015 and was valid from 28 March 2015 to 28 March 2020. The permit authorised the clearing of up to 14.657 hectares of native vegetation within a boundary of approximately 46 hectares, for the purpose of sand mining and associated activities. However, approximately 31.487 hectares of the original application area was identified by the proponent as comprising two buffer zones which would not be cleared, in accordance with an agreement between the proponent and the local Shire to provide visual buffers to the project site. The buffer zones consisted of an 18.619 hectare area located to the north of the proposed clearing area, and a 12.868 hectare area located to the south of the proposed clearing

area. These proposed buffer areas were enforced by a condition imposed on the granted clearing permit which prohibited clearing within the buffer zones. Hence the granted permit (CPS 6439/1) authorised the clearing of up to 14.657 hectares within a designated area of the same size.

On 30 April 2015 the Department of Mines and Petroleum (DMP) amended clearing permit CPS 6439/1 to correct an administrative error, amending the authorised purpose of clearing to "laydown area, stockpiles, weighbridge, workshop, office, toilet and crib facilities", to more accurately reflect the registered purposes of Miscellaneous Licence 47/543. There were no other changes to the permit.

On 17 December 2019, the Permit Holder applied to amend CPS 6439/2 to increase the amount of authorised clearing from 14.657 hectares to 20 hectares, increase the boundary of the area where clearing was authorised to include part of the southern buffer area, and extend the permit duration by 10 years.

3. Assessment of application against Clearing Principles

Comments

Norwest Sand and Gravel Pty Ltd has applied to increase the amount of clearing authorised by 5.343 hectares, increase the boundary of the area where clearing was authorised by approximately 5.343 hectares, and extend the permit duration by ten years. The additional clearing will allow for the expansion of areas used for mining-related infrastructure, including laydown and stockpile areas.

The amendment extends the southern boundary of the clearing area by approximately 150 metres at the widest point, reducing the size of an area which was previously retained as a visual buffer zone.

The application area occurs within the Chichester subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The amendment area is broadly mapped as Beard vegetation association 157, which is consistent with the previous permit area (GIS Database). Approximately 99% of the pre-European extent of Beard vegetation association 157 remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). Hence, the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

West Ecology (2012) conducted a flora and vegetation survey over the majority of the amendment area during July 2012. The vegetation condition was described as ranging from Good to Completely Degraded, with the majority of the vegetation considered to be in Good condition (West Ecology, 2012).

There are no conservation areas within or in close proximity to the application area (GIS Database). No flora or fauna species of conservation significance, or Threatened or Priority Ecological Communities have been recorded within the amendment area (West Ecology, 2012; GIS Database), and the amendment area is not likely to represent an area of greater biodiversity than the previous permit area or surrounding areas.

The vegetation associations, landforms, and fauna habitat types occurring within the amendment area are similar to those occurring within the previously approved permit area, and are well represented in the region (West Ecology, 2012; GIS Database). The additional clearing and extension of the permit boundary is unlikely to have a significant impact on fauna habitat availability at a local or regional scale.

The amendment area falls within the Ruth and Cheerawarra land systems, which also occur within the previous permit area (GIS Database). The majority of the amendment area falls within the Ruth landsystem which is considered not susceptible to erosion (Van Vreeswyk et al., 2004). A small part of the amendment area falls within the Cheerawarra land system, which is likely to be susceptible to wind erosion when vegetation cover is removed (Van Vreeswyk et al., 2004). The continued implementation of the existing staged clearing condition may minimise the erosion risk, however the proposed increase in clearing by five hectares is unlikely to result in appreciable land degradation.

There are no permanent watercourses or wetlands within the amendment application area. One minor ephemeral watercourse extends from the existing permit area into the amendment area (GIS Database). The additional five hectares of clearing is unlikely to have any significant additional impact on surface or groundwater quality, or on the incidence or intensity of flooding.

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 reports CPS 6439/1 and 6439/2.

Methodology Government of Western Australia (2019)
Van Vreeswyk et al. (2004)
West Ecology (2012)

GIS Database:
- DPaW Tenure
- Hydrography, Lakes

- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- 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 (WC1999/014) over the area under application (DPLH, 2020). This claim has been determined by the Federal Court on 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 that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There is one registered Aboriginal Site of Significance within the application area (DPLH, 2020). 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 13 January 2020 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application, raising no objections to the proposed clearing.

Methodology DPLH (2020)

4. References

- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 4 February 2020).
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, Western Australia.
- West Ecology (2012) Flora and Vegetation Survey of Norwest Sand and Gravel Tenement L47/543. Report prepared for Norwest Sand and Gravel, by West Ecology, October 2012.

5. Glossary

Acronyms:

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

DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DoEE)
DWER	Department of Water and Environmental Regulation, Western Australia
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
TEC	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.