

1. Application det	ails					
1.1 Permit applic	ation de	tails				
Permit application No ·		7496/1				
Permit type:		Purpose				
1.2. Proponent details Proponent's name:						
		Australian Gartnet Pty Ltd				
1.3. Property details Property: Local Government Area:						
		Miscellaneous Lease 70/166				
		Shire of Northampton				
Colloquial name:	Colloquial name:					
1.4. Application						
Clearing Area (ha) No. T 1.60		rees	Method of Clearing Mechanical Removal	For the purpose of: Mineral Production and Associated Infrastructure		
1.5. Decision on application						
Decision on Permit Application:		Grant	0017			
Decision Date.			2017			
2. Site Information	1					
2.1. Existing envir	ronment	t and info	ormation			
2.1.1. Description of	the nativ	ve vegeta	tion under application			
Vegetation Description	Beard ve vegetatio	getation as on associati	sociations have been mapped ons are located within the app	d for the whole of Western Australia. The following Beard plication area (GIS Database):		
	17: Shru	blands; <i>Acacia rostellifera</i> thicket;				
	371: Low	^r forest; Acacia rostellifera				
	A flora ai 11 Octob Environn	nd vegetation survey of the Balline Project Area, inclusive of the application area, was undertaken from 5 - per 2016. The following vegetation communities were recorded within the application area (Onshore nental, 2013):				
	1. Open Scholtzia Anagallis	Heath of <i>Melaleuca cardiophylla</i> , <i>Olearia</i> sp. indet. over Low Shrubland of <i>Comesperma scoparium</i> , a sp. Kalbarri, <i>Acanthocarpos preissii</i> over Very Open Herbland of <i>Medicago truncata, Brassica tournefortii,</i> s ave.				
	2. High S <i>latifolia</i> , I	Shrubland of <i>Melaleuca cardiophylla</i> over Shrubland of <i>Diplolaena grandiflora, Rhagodia latifolia</i> var. <i>Pimelea microcephala</i> over Very Open Herbs of <i>Brassica tournefortii.</i>				
	3. High S fruticulos	Shrubland of Acacia rostellifera over Shrubland Olearia sp. indet., Pimelea microcephala, Zygophyllum sum over Low Shrubland of Acanthocarpos preissii, Pimelea sessilis, Solanum oldfieldii.				
	4. High S <i>barbata</i> ,	Shrubland of Acacia rostellifera, Alyogyne hakeifolia over Open Annual Tussock Grassland of Avena Bromus rubens over Open Herbland of Brassica tournefortii, Medicago truncate.				
	5. Low O Olearia s elegantis	pen Heath p. indet <i>Pir</i> s <i>ima</i> and A	of Scholtzia sp. Kalbarri, Olea nelea microcephala, Anthocei Nustrostipa crinita.	aria sp. indet Acanthocarpus preissii over Open Shrubland of rcis intricata over Scattered Tussock Grassland of Austrostipa		
Clearing Description	Balline Garnet Project. Australian Garnet Pty Ltd (Australian Garnet) proposes to clear up to 4.60 hectares of native vegetation within a total boundary of the same size, for the purpose of mineral production and associated infrastructure. The project is located approximately 20 kilometres north of Gregory, in the Shire of Northampton.					
	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).					
	То					
	Degrade 1994).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Kieghery, 1994).				

3. Assessment of application against clearing principles

Comments The proposed clearing of up to 4.60 hectares is for the purpose of constructing a service corridor as part of the development of a groundwater supply bore field which will provide water to the Balline Garnet Mine (Australian Garnet, 2017).

The application area occurs within the Geraldton Hills subregion of the Geraldton Sandplains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). At a broad scale vegetation can be described as sand heaths with emergent Banksia and Actinostrobus, York Gum woodlands on limestones depending on depth of coastal-sand mantle, low closed forest of *Acacia rostellifera* (now cleared) on alluvial plains of Greenough and Irwin River (behind beach dune system south of Geraldton) (CALM, 2002).

A flora and vegetation survey of the Balline Project Area, inclusive of the application area, was undertaken from 5-11 October 2016 (Onshore Environmental, 2013). A total of 151 taxa from 54 families and 116 genera were recorded. No Threatened flora were recorded during the flora and vegetation survey. Four species of Priority flora were recorded during the survey (Onshore Environmental, 2013):

- Melaleuca huttensis Priority 1 as listed by DPaW;
- Cryptandra glabriflora Priority 2 as listed by DPaW;
- Anthocercis intricata Priority 3 as listed by DPaW;
- Beyeria cinerea subsp. cinerea Priority 3 as listed by DPaW;

Of the Priority flora species listed above, only one individual of *Anthocercis intricata* was recorded within the application area. Given the minimal amount of Priority flora to be impacted and the presence of individuals in the surrounding area (Onshore Environmental, 2013), the proposed clearing is unlikely to impact the conservation status of Priority flora at a local or regional scale.

No Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) are known to occur within the application area and none were recorded during a flora and vegetation survey (GIS Database; Onshore Environmental, 2013).

The application area has been mapped as Beard vegetation associations 17and 371 (GIS Database). Vegetation association 17 has greater than 50% of pre-European extent remaining at a state and bioregional level (Government of Western Australia, 2015). Vegetation association 371 however has less than 10% of pre – European vegetation remaining at a state and bioregional level. Approximately less than 0.6 hectares of association 371 will be impacted by the proposed clearing. Given the small scale of clearing proposed and the fact that the area has been previously impacted by grazing, the impact upon the 0.6 hectares of vegetation association 371 is considered minimal.

A portion of the application area has been previously cleared for agricultural purposes with the remaining native vegetation acting as a local remanent (Australian Garnet, 2017). However, large remnants of vegetation remain to the north and east of the application area and will not be affected by the proposed clearing (Australian Garnet, 2017; GIS Database). Areas to the south and southwest of the application area contain native vegetation, including the Utcha Wells Nature Reserve (Australian Garnet, 2017; GIS Database). Given the small scale of clearing proposed (4.6 hectares) and native vegetation surrounding the application area, it is unlikely that the vegetation to be cleared acts as a significant remanent.

The relatively small (4.6 hectares) application area has been previously cleared for grazing and as such the capacity of the application area to support large or diverse fauna assemblages is considered to be limited due to past land practices (Australian Garnet, 2017; Onshore Environmental, 2013).

The small scale of clearing proposed is unlikely to have any impacts on surface water or ground water quality, or exacerbate the incidence of flooding (GIS Database). The application area is not located within a DPaW managed reserve (GIS Database).

The vegetation to be cleared exists on sandy rises and limestone outcrops (Australian Garnet, 2017). Clearing may increase the risk of wind erosion if not appropriately managed (Australian Garnet, 2017). The working areas of the proposed service corridor will be stabilised with suitable material and areas cleared for construction that are no longer required for operation will be rehabilitated within six months (Australian Garnet, 2017).

Weeds also have the potential to occur within the application area (Onshore Environmental, 2013). Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed and dieback management condition.

The application area has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*, and the proposed clearing may be at variance to Principles (e) and (g), and is not likely to be at variance to Principles (a), (b), (c), (d), (f), (h), (i), and (j).

Methodology Australian Garnet (2017) CALM (2002) Government of Western Australia (2015) Onshore Environmental (2013)

GIS Database:

- DPaW Tenure
- Hydrography, linear
- IBRA Australia
- Pre European Vegetation
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

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

Comments: There is one native title claim (WC 2000/001) over the area under application (DAA, 2017). This claim has been registered with the Native Title Tribunal on behalf of the claimant group. However, the tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (ie. 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 Sites of Aboriginal Significance located in the area applied to clear (DAA, 2017). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal 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 20 March 2017 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology: DAA (2017)

4. References

DAA (2017) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2/ (Accessed 4 April 2017).

Government of Western Australia (2015) 2015 Statewide Vegetation Statistics Incorporating the CAR reserve analysis (Full Report). Department of Environment and Conservation, Western Australia, June 2015.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Onshore Environmental (2017) Balline Garnet Project Level 2 Flora and Vegetation Survey. Report prepared for Australian Garnet Pty Ltd, by Onshore Environmental Consultants Pty Ltd, November 2013.

Australian Garnet (2017) Additional Information to support Native Vegetation Clearing Permit Application on Miscellaneous Lease 70/166. Australian Garnet Pty Ltd, February 2017.

5. Glossary

Acronyms:

BoM DAA DAFWA DEC DEE DER DMP DRF	Bureau of Meteorology, Australian Government Department of Aboriginal Affairs, Western Australia Department of Agriculture and Food, Western Australia Department of Environment and Conservation, Western Australia (now DPaW and DER) Department of the Environment and Energy, Australian Government Department of Environment Regulation, Western Australia Department of Mines and Petroleum, Western Australia Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
EPA	Environmental Protection Authority, Western Australia
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
PEC	Priority Ecological Community, Western Australia
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
TEC	Threatened Ecological Community

Definitions:

т

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.

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. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX Presumed extinct species

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

Migratory birds protected under an international agreement

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 the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P Priority species

IA

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and 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.