

1. Application detai	ils	
1.1. Permit application details		
Permit application No.:	5899/2	
Permit type:	Purpose Permit	
1.2. Proponent deta	ails	
Proponent's name:	Warrego Energy Pty Ltd	
1.3. Property detail	s	
Property:	Petroleum Exploration Permit 469	
Local Government Area:	Shire of Mingenew and Shire of Three Springs	
Colloquial name:	West Erregulla Exploration Program	
1.4. Application		
Clearing Area (ha)	No. Trees Method of Clearing For the purpose of:	
70	Mechanical Removal Seismic Survey and Appraisal Well	
1.5. Decision on application		
Decision on Permit Applic		
Decision Date:	11 April 2014	
2. Site Information		
-	onment and information	
•	ne native vegetation under application	
Vegetation Description	Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation associations are located within the application area (GIS Database):	
	Beard vegetation association 49: Shrublands; mixed heath; and Beard vegetation association 379: Shrublands; scrub-heath on lateritic sandplain in the central Geraldton Sandplain Region (Government of Western Australia, 2013; GIS Database).	
	A Level 2 flora and vegetation survey was conducted over the application area by Woodman Environmental Consulting (Woodman) (2013). The survey included an initial reconnaissance visit (15 September 2011), a detailed survey over spring in 2011 (26 to 30 September, 24 to 27 October and 20 to 26 November) and another detailed survey over spring in 2012 (10 to 13 September and 2 to 5 October) which identified 14 vegetation types (VT) within the application area:	
	VT 1a: Mid open forest of <i>Eucalyptus accedens</i> over mid open shrubland dominated by <i>Gastrolobium spinosum</i> , Olearia rudis and Anthocercis genistoides over low open forbland and rushland dominated by <i>Calandrinia</i> <i>calyptrata</i> , <i>Calandrinia corrigioloides</i> , <i>Millotia myosotidifolia</i> , <i>Trachymene pilosa</i> and <i>Conostylis aculeata</i> subsp. <i>breviflora</i> on grey sand on mid slopes;	
	VT 1b: Mid open forest of <i>Eucalyptus accedens</i> over low open shrubland dominated by <i>Gastrolobium plicatum</i> and <i>Dodonaea divaricata</i> over low open forbland of mixed species including <i>Goodenia berardiana, Rhodanthe manglesii, Podolepis lessonii</i> and <i>Acanthocarpus canaliculatus</i> on grey-brown sandy or clay loams on mid-upper slopes;	
	VT 2: Mid open forest of <i>Eucalyptus accedens</i> or low open forest <i>E. loxophleba</i> subsp. <i>loxophleba</i> over mid open shrubland dominated by <i>Rhagodia preissii</i> subsp. <i>preissii</i> and <i>Melaleuca acutifolia</i> on greybrown sandy loams on flats and slopes;	
	VT 3: Occasional mid woodland of <i>Eucalyptus accedens</i> over mid shrubland dominated by <i>Melaleuca concreta, M. marginata</i> and <i>M. acutifolia</i> over low isolated mixed shrubs and sedges including <i>Acacia ericksoniae</i> and <i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000) on pink-brown or white clay loams on flats;	
	VT 4: Tall closed to open shrubland dominated by <i>Allocasuarina campestris</i> or occasionally <i>Acacia neurophylla</i> subsp. <i>neurophylla</i> over mid open shrubland and sedgeland of mixed species including <i>Grevillea biternata, Melaleuca radula, Melaleuca concreta, Thryptomene</i> sp. Mingenew (Diels & Pritzel 332) (P3), <i>Ecdeiocolea monostachya</i> and <i>Thryptomene racemulosa</i> on grey-brown sand, sandy loam or clay loam, occasionally with granitic pebbles, on slopes and flats adjacent to seasonal creeks;	
	VT 5: Tall closed shrubland to shrubland dominated by <i>Allocasuarina campestris</i> with occasional <i>Acacia aciphylla</i> , <i>Acacia neurophylla</i> subsp. <i>neurophylla</i> and <i>Melaleuca viminea</i> subsp. <i>viminea</i> over sparse low shrubland and sedgeland of mixed species including <i>Ecdeiocolea monostachya</i> and <i>Thryptomene racemulosa</i> over open forbland and grassland of mixed introduced species including <i>*Ehrharta longiflora</i> and <i>Ursinia anthemoides</i> on grey or brown sandy or clay loams within and on the banks of seasonal creeks;	
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VT 6: Open woodland of *Eucalyptus loxophleba* subsp. *loxophleba* over mid closed shrubland dominated by *Melaleuca marginata* over sparse forbland of mixed species including *Rhodanthe polycephala* on greybrown clay on slopes above seasonal creeks;

VT 7a: Mid mallee woodland to isolated mallees of *Eucalyptus conveniens* or mid open shrubland of *Allocasuarina campestris* over low shrubland and sedgeland of mixed species frequently dominated by *Ecdeiocolea monostachya* and *Melaleuca aspalathoides*, or occasionally *M. tinkeri, Hakea auriculata* or *Hakea lissocarpha*, on gravelly grey or brown clay loams or sands, usually with laterite on or near the surface, on slopes and crests;

VT 7b: Mid mallee woodland to isolated mallees of *Eucalyptus conveniens* or mid open shrubland of *Allocasuarina campestris* over low shrubland and sedgeland of mixed species dominated by *Banksia carlinoides, Ecdeiocolea monostachya, Hakea incrassata, Hibbertia hypericoides* and *Melaleuca aspalathoides* on gravelly grey or brown clay loams or sands, usually with laterite on or near the surface, on slopes and crests;

VT 8: Mid mallee woodland to isolated mallees of *Eucalyptus conveniens* over mid shrubland to open shrubland dominated by *Allocasuarina campestris* over low shrubland and sedgeland of mixed species dominated by *Ecdeiocolea monostachya, Hakea auriculata, Melaleuca radula, M. aspalathoides* and *Banksia fraseri* var. *fraseri* on gravelly grey or brown clay loams usually over massive laterite on breakaway tops, ridges and lateritic rises;

VT 9: Mid to low open shrubland of Allocasuarina campestris, Melaleuca concreta and Melaleuca marginata over low shrubland dominated by Melaleuca tinkeri and occasionally Gastrolobium plicatum over low shrubland and forbland dominated by Stylidium torticarpum (P3), Leucopogon sp. Yandanooka (M. Hislop 2507) and Micromyrtus rogeri (P1) on gravelly pink-brown or white-grey clay or clay loam over decaying laterite on breakaway tops and slopes;

VT 10: Mid sparse to open shrubland of mixed species including *Calothamnus quadrifidus* subsp. *angustifolius*, *Grevillea biformis* subsp. *biformis* and *Banksia attenuata* over low shrubland and sedgeland of mixed species dominated by *Ecdeiocolea monostachya*, *Melaleuca leuropoma*, *Daviesia divaricata* subsp. *divaricata* ms, *Mesomelaena pseudostygia* and *Banksia shuttleworthiana* on yellow-brown or occasionally grey sand on slopes and valley floors;

VT 11: Mid sparse to open shrubland of *Allocasuarina campestris* and *Grevillea biformis* subsp. *biformis* over low shrubland and sedgeland dominated by *Hakea circumalata, Lepidobolus preissianus* subsp. *preissianus, Mesomelaena pseudostygia* and *M. stygia* subsp. *deflexa* (P3) on yellow or yellow-brown sand or sandy loam on mid to upper slopes;

VT 12: Occasional mid sparse to open shrubland of *Allocasuarina campestris* and *Grevillea biformis* subsp. *biformis* over low shrubland and sedgeland dominated by *Beaufortia elegans, Hibbertia hypericoides* and *Ecdeiocolea monostachya* on grey or brown sand or sandy loam on mid to upper slopes;

VT 13a: Low open woodland of *Eucalyptus todtiana* over mid to low shrubland of mixed species dominated by *Allocasuarina humilis, Banksia scabrella* (P4), *Calothamnus sanguineus, Eremaea beaufortioides* var. *microphylla, Melaleuca* aff. *leuropoma* and *Hibbertia hypericoides* over low shrubland and sedgeland of mixed species including *Banksia dallanneyi* subsp. *media, Conostylis canteriata, Mesomelaena pseudostygia* and *Caustis dioica* on grey or brown sand on lower and mid slopes;

VT 13b: Low open woodland of *Eucalyptus todtiana* over mid to low shrubland of mixed species dominated by *Allocasuarina humilis, Calothamnus sanguineus, Hakea trifurcata, Hibbertia hypericoides* and *Melaleuca leuropoma* over low shrubland and rushland of mixed species including *Banksia dallanneyi* subsp. *media, Conostylis aculeata* subsp. *breviflora* and *Conostylis canteriata* on grey, brown or yellow sand on flats, in depressions and on slopes; and

VT 14: Low open shrubland dominated by *Calothamnus quadrifidus* subsp. *angustifolius*, *Banksia carlinoides*, *Hakea lissocarpha* and *Verticordia densiflora* over low open shrubland, sedgeland and forbland dominated by *Dampiera teres* (broad-leaf variant), *Jacksonia angulata*, *Harperia lateriflora*, *Opercularia vaginata* and *Melaleuca trichophylla* on greybrown sands, sandy loams and clay loams in minor drainage lines and on flats.

C: Cleared Land

Areas where no native vegetation was present due to human disturbance (predominantly paddocks) were mapped as 'Cleared Land'. A total of 3099.26 hectares of Cleared Land was mapped in the application area.

Clearing Description West Erregulla Exploration Program. Warrego Energy Pty Ltd proposes to clear up to 70 hectares of native vegetation within a total boundary of approximately 8,575 hectares for the purpose of a seismic survey and appraisal well. The project is located approximately 41 kilometres south of Dongara, in the Shire of Mingenew and Three Springs.

Vegetation Condition Pristine: No obvious signs of disturbance (Keighery ,1994);

To:

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

Comment The vegetation condition was assessed during a survey undertaken by Woodman (2013).

Four appeals were received against the decision of the Department of Mines and Petroleum (DMP) to grant a clearing permit (CPS 5899/1) to Warrego Energy Limited on 30 January 2014.

On 9 April 2014, the Minister for Environment allowed the appeals to the extent that additional conditions be applied to the clearing permit as follows:

- outlining steps to be followed by the Permit Holder to minimise the risk of introduction and spread of dieback;
- clearing methodology is specified in the permit;

- the rehabilitation requirement is amended to reflect the clearing methodology for the seismic lines and the appraisal well and to ensure third party access is prevented to survey lines and access tracks;
- to avoid clearing, minimise clearing and reduce impacts of clearing on environmental values; and
- to require the Permit Holder to adhere to the commitments in their Environmental Management Plan.

Pursuant to section 110 of the Environmental Protection Act 1986, DMP must amend CPS 5899/1 to give effect to the Minister's appeal decision.

3. Assessment of application against clearing principles

Comments

The permit has been amended to include additional conditions, to give effect to an appeal determination by the Minister for Environment.

The assessment against the Clearing Principles remains the same as in decision report CPS 5899/1.

Methodology

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

Comments

There are two Native Title claims over the area under application (GIS Database). The claim WC1997/072 was registered with the National Native Title Tribunal on 12 December 2011. The claim WC2004/002 was registered with the National Native Title Tribunal on 2 March 2005. 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, 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.

It is noted that the proposed clearing may impact on a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Federal) Department of Environment for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Environment for further information regarding notification and referral responsibilities under the EPBC Act.

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- to require the Permit Holder to adhere to the commitments in their Environmental Management Plan.

Pursuant to section 110 of the *Environmental Protection Act 1986*, DMP must amend CPS 5899/1 to give effect to the Minister's appeal decision.

Methodology GIS Database:

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

4. References

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.

Woodman Environmental Consulting Pty Ltd (Woodman) (2013) West Erregulla Project - Flora and Vegetation Assessment. Report prepared for Warrego Energy Pty Ltd, September 2013

5. Glossary

Acronyms:

ВоМ	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.
- 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 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 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)

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:

EX

- (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.