



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6938/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: AWE Perth Pty Ltd

1.3. Property details

Property: Production Licence L1

Local Government Area: Shire of Irwin
 Colloquial name: Xyris Production Facility

1.4. Application

| | | | |
|--------------------|-----------|--------------------|--|
| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
| 3.5 | | Mechanical Removal | Gas Production and Associated Activities |

1.5. Decision on application

Decision on Permit Application: Grant
 Decision Date: 31 March 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The clearing permit application area has been broadly mapped as the following Beard vegetation association (GIS Database):

378: Shrublands; scrub-heath with scattered Banksia spp, Eucalyptus todtiana & Xylomelum angustifolium on deep sandy flats in the Geraldton Sandplain region.

A flora and vegetation survey of the application area was undertaken by Maia Environmental (2016). Two vegetation communities were identified:

ASL – Acacia shrubland: Tall shrubland of Acacia rostellifera with +/- a Mid sparse shrubland of Banksia attenuata and isolated Tussock Grasses of Austrostipa elegantissima

DIS - Disturbed: Tussock Grassland of mixed annual grasses (indeterminate at time of survey) a forbland of mixed annual species dominated by *Euphorbia terracina with isolated shrubs of Acacia rostellifera.

The remaining area consists of annual grass species which have died off or been heavily grazed, or planted Eucalypts.

*Identified weed species

Clearing Description Xyris Production Facility.
 AWE Pty Ltd proposes to clear up to 3.5 hectares of native vegetation within a total boundary of approximately 13.2 hectares, for the purpose of gas production and associated infrastructure. The project is located approximately 18 kilometres east of Dongara, in the Shire of Irwin.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
 To
 Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment The proposed clearing will allow for the refurbishment of the existing Xyris Production Facility.
 Vegetation descriptions were derived from a targeted flora survey undertaken by Maia Environmental (2016).
 The application area is located on agricultural land which partly consists of cleared land and is on the edge of an area of remnant native vegetation.

3. Assessment of application against clearing principles

Comments The application area is located within the Lesueur Sandplain subregion of the Geraldton Sandplains Interim Biogeographic Regionalisation for Australia bioregion (GIS Database). The Lesueur Sandplain is characterised by shrub-heaths rich in endemics occurring on a mosaic of lateritic mesas, sandplains, coastal sands and limestones as well as heath on lateritised sandplains along the subregion's north eastern margins (CALM, 2002).

The proposed clearing is for the purpose of refurbishment of the Xyris Production Facility (Maia Environmental, 2016). AWE Perth Pty Ltd advises that where possible, existing cleared areas surrounding the facility will be used to reduce the area that is required to be cleared under this permit (Maia Environmental, 2016).

A Level 1 flora and vegetation survey of the application area was undertaken on 15 January 2016 by botanists from Maia Environmental (Maia Environmental, 2016). Seventeen flora taxa were recorded within the application area (Maia Environmental, 2016). The majority of the application area consists of regrowth or previously cleared farmland, or alternatively planted eucalyptus (Maia Environmental, 2016). Approximately 0.6 hectares of native vegetation remains within the application area and the application area was assessed as having low biodiversity (Maia Environmental, 2016). No Threatened or Priority flora were recorded within the application area. No Threatened Ecological Communities or Priority Ecological Communities are known to occur within the application area (GIS Database) and none were recorded during the flora and vegetation survey (Maia Environmental, 2016).

The application area has been mapped as Beard vegetation association 378, which retains approximately 64% of the pre-European vegetation extent at a state and bioregional level (Government of Western Australia, 2014). Given the small scale of the proposed clearing and lack of Priority or Threatened species, it is unlikely the proposed clearing will have a significant impact on the biodiversity of the area. The application area occurs along the edge of a remnant of native vegetation, surrounded by large areas of cleared farmland. However, the small area of vegetation to be cleared is not considered to represent a significant remnant of native vegetation.

The application area does not occur within a conservation area (GIS Database). The nearest conservation area is Yardanogo Nature Reserve which occurs approximately 2.5 kilometres south of the application area (GIS Database). The small scale of clearing (3.5 hectares) is unlikely to impact on any conservation areas. No water courses or wetlands have been mapped within the application area (GIS Database) and the small scale of clearing is unlikely to impact surface water or groundwater quality.

Two weed species were recorded within the application area, *Avena Barbata* and *Euphorbia terracina* (Maia Environmental, 2016). Additional weed species have the potential to occur within the application area. The application area also occurs within a dieback (*Phytophthora cinnamoni*) risk zone (Maia Environmental, 2016). Weed invasion and dieback infestation has the potential to alter the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed and dieback management condition.

A Level 1 fauna assessment was conducted over the Waitsia Project Area (approximately 8,400 hectares), which included the application area (Bamford, 2015). Two Vegetation Substrate Associations (VSAs) that differ in vegetation type and condition were identified, VSA 1 and VSA 2. VSA 1 consists of agricultural land, extensively cleared sands and scattered paddock trees. VSA 2 consists of open banksia woodland on sand. The fauna assemblage was described as depauperate, missing most medium – sized and small mammals, as well as some birds, reptile and invertebrates. VSA 1 is not considered to act as significant habitat for fauna species. VSA 2 may provide more suitable habitat for the Carnaby's Black Cockatoo. The proposed clearing of up to 3.5 hectares of native vegetation is unlikely to result in foreseeable significant impacts to local fauna species, including species of conservation significance, given that more suitable areas of native vegetation occur nearby and throughout the region, including two large nature reserves (Yardanogo and Beekeepers).

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance with Principles (a), (b), (c), (d), (f), (g), (h), (i) and (j) and is not at variance to Principle (e).

Methodology CALM (2002)
Bamford (2015)
Government of Western Australia (2014)
Maia Environmental (2016)

GIS Database:
- DPaW Tenure
- IBRA Australia
- Imagery
- Hydrography, linear
- 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 1997/072) over the area under application (DAA, 2016). 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, 2016). 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 22 February 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology: DAA (2016)

References

- Bamford (2015) *Waitsia Wells, Dongara – Fauna Assessment Report*. Report prepared for AWE Perth Pty Ltd, by Bamford Consulting Ecologists, May 2015.
- CALM (2002) *A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions*. Department of Conservation and Land Management, Western Australia
- DAA (2016) *Aboriginal Heritage Inquiry System*. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 1 March 2016)
- Government of Western Australia (2014) *2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report)*. Current as of June 2014. 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.
- Maia Environmental (2016) *Combined Level 1 Flora and Vegetation Reconnaissance and Targeted Flora Survey*. Report prepared for AWE Perth Pty Ltd, by Maia Environmental Consultancy, February 2016.

4. Glossary

Acronyms:

| | |
|-----------------|---|
| BoM | Bureau of Meteorology, Australian Government |
| DAA | Department of Aboriginal Affairs, Western Australia |
| DAFWA | Department of Agriculture and Food, Western Australia |
| DEC | Department of Environment and Conservation, Western Australia (now DPaW and DER) |
| DER | Department of Environment Regulation, Western Australia |
| DMP | Department of Mines and Petroleum, Western Australia |
| DRF | Declared Rare Flora |
| DotE | Department of the Environment, Australian Government |
| DoW | Department of Water, Western Australia |
| DPaW | Department of Parks and Wildlife, Western Australia |
| DSEWPaC | Department of Sustainability, Environment, Water, Population and Communities (now DotE) |
| 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:

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

- T** **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.
- IA** **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**
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.