



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7845/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Montague Resources Australia Pty Ltd**

1.3. Property details

Property: Exploration Licence 77/2244
Local Government Area: Shire of Yilgarn
Colloquial name: Texas Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
8.15		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 18 January 2018

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 associations:
519 Shrublands; mallee scrub, *Eucalyptus eremophila*; and
08 Medium woodland; salmon gum and gimlet (GIS Database).

A Level 1 Flora and Vegetation survey of the application tenement and additional projects tenements was conducted comprising a desktop assessment and field survey. The surveys were completed by Native Vegetation Solutions from 20 to 22 July 2016. This included targeted searches of drill lines and access tracks for conservation significant flora. Additional targeted searches of proposed drilling lines were completed by Blueprint Environmental Strategies in October 2017 (Kidman Resources, 2017b).

The following vegetation associations were recorded within the application area (Kidman Resources, 2017b):
a) *Eucalyptus* mallee woodland over *Melaleuca* shrubland and emergent *Callitris preissii*;
b) *Eucalyptus* mallee woodland (Burnt);
c) *Eucalyptus* woodland over *Allocasuarina* shrubland;
d) Sandplain mallee heath shrubland (Burnt);
e) *Eucalyptus salmonophloia* woodland;
f) *Eucalyptus salmonophloia* woodland (Burnt); and
g) *Eucalyptus urna* woodland over *Melaleuca* shrubland.

Clearing Description Texas Project.
Montague Resources Australia Pty Ltd proposes to clear up to 8.15 hectares of native vegetation within a boundary of approximately 66.5 hectares, for the purpose of mineral exploration. The project is located approximately 62 kilometres south east of Marvel Loch, within the Shire of Yilgarn.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
to

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

Comment The field assessment carried out by Native Vegetation Solutions in 2016 established that the condition of the vegetation in the survey area is overall "Very Good", to "Good", with certain areas "Good" to "Degraded". The majority of the survey area was generally located on existing drill lines or tracks where clearing has already taken place, with some areas also affected by fire. Outside of the survey area, vegetation would be considered "Excellent", with only fire as the main source of disturbance (Native Vegetation Solutions, 2016).

3. Assessment of application against Clearing Principles

Comments

The application area is located within the Southern Cross sub-region of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Southern Cross subregion consists of diverse Eucalyptus woodlands (*Eucalyptus salmonophloia*, *E. salubris*, *E. transcontinentalis*, *E. longicornis*) and is rich in endemic eucalypts which occur around salt lakes, on low greenstone hills, valley alluvials and broad plains of calcareous earths (CALM, 2002).

The proposal is located wholly within the Jilbadji (C Class) Nature Reserve which is an area of approximately 200,000 hectares (GIS Database). The environmental values of the Jilbadji Nature Reserve include: large reserve size, importance as a fauna refuge site, high diversity of fauna species and flora species endemism. The Jilbadji Nature Reserve is a significant area in maintaining existing ecological processes at a regional scale (DotEE, 2017). It is substantially larger than the average reserve area in the Wheatbelt of 114 hectares and therefore is a potentially important refuge for many species, including invertebrates and smaller vertebrates (DotEE, 2017). The Nature Reserve also supports a very high diversity of reptiles, with 38 species, and a high diversity of native mammal species, with 15 species (DotEE, 2017).

Three Priority Flora species were recorded within the survey area, *Acacia undosa* (P3), 40 individuals recorded; *Grevillea lullfitzii* (P1), 10 individuals recorded; and *Microcorys* sp. Forrestania (P4), 70 individuals recorded (Western Australian Herbarium 1998 -; Native Vegetation Solutions, 2016). The three Priority flora species found within the survey area prefer general vegetation habitats of open to low woodlands (Western Australian Herbarium 1998 -), with limited individuals affected by the proposed track (Kidman Resources, 2017b). Montague Resources have committed to avoiding Priority flora where possible and not all of these species will be cleared, with only 14 individuals of *Microcorys* sp. Forrestania (P4) and two plants of *Grevillea lullfitzii* (P1) possibly affected, the potentially affected. Priority flora populations will be flagged in the field and avoided wherever practicable (Native Vegetation Solutions, 2016).

Montague Resources/Kidman Resources have developed a Conservation Management Plan as required by the tenement conditions on E77/2244. The Conservation Management Plan (CMP) prepared for the proposal and approved by the Department of Biodiversity, Conservation and Attractions (DBCA) outlines the management strategies to be implemented in order to minimise impacts to Priority flora. Some of these strategies include avoidance of Priority flora species and their buffer areas, demarcation of approved disturbance areas and supervision of clearing areas (Kidman Resources, 2017a; 2017b).

A Level 1 Vertebrate Fauna Survey was completed of proposed exploration areas comprising a desktop assessment and field survey from 20 to 23 July 2016 (Western Wildlife, 2016). A total of 12 vertebrate and 1 invertebrate fauna species of conservation significance have the potential to occur in the study area, these comprise seven species protected by legislation and five considered to be Priority species by DBCA (Kidman Resources, 2017b; Western Wildlife, 2016).

Two species listed as Vulnerable under the EPBC Act and under Schedules of the WC Act were considered to have a high likelihood of occurrence, the Malleefowl and Chuditch (Western Wildlife, 2016). There are only occasional records of the Chuditch from the Wheatbelt and Goldfields, with this population estimated at 532 – 601 mature individuals in 2006 (Western Wildlife, 2016). The Chuditch potentially occurs in the woodlands and shrublands of the survey areas, though any population in Jilbadji Nature Reserve is likely to have been impacted by fire (Kidman Resources, 2017b; Western Wildlife, 2016).

Overall, the potential impacts of the proposed clearing are likely to be small on both a local and regional scale, as only a small area of fauna habitat will be disturbed within a very large tract of intact woodland. The habitat that is to be disturbed is located along historical drill lines and access tracks and is regrowth or rehabilitation rather than undisturbed native vegetation. Mature trees that may contain hollows are absent from the historic drill lines and access tracks, though they occur in adjacent habitat areas (Western Wildlife, 2016).

Blueprint Environmental conducted a separate targeted Malleefowl survey in October 2017 with additional areas to the previous areas included in the survey. Two inactive Malleefowl mounds were recorded, one adjacent and one within tenement E77/2244 (Kidman Resources, 2017b). During a follow up site visit one of these mounds was not sighted by fauna personnel and thus remains unconfirmed. The inactive mounds are likely to have been inactive since fire had recently burnt the area, and are unlikely to be used again until after the vegetation has regenerated sufficiently to provide leaf litter for use in nest construction. Malleefowl are highly likely to forage throughout the mallee woodlands and sandplain mallee heath of the region, including those in the study areas, additionally a single bird was observed on a track in the Texas tenement. The sandplain mallee heath is breeding habitat, though breeding is unlikely to be occurring currently due to the extensive fire in this habitat. Mallee woodland may also be breeding habitat, where there is a shrubland understorey to provide leaf litter (Kidman Resources, 2017b; Western Wildlife, 2016).

Considering the small scale of clearing and the low impact nature of the proposed activities, impacts on conservation significant fauna species or fauna habitats, are expected to be minimal. However, Malleefowl mounds should be avoided. Potential impacts to Malleefowl may be minimised by the implementation of a fauna management condition.

Four fauna habitats (Sandplain Mallee heath, Mallee woodland, Salmon Gum woodland and *Eucalyptus urna* woodland) were identified as part of the surveys and all habitats are considered to be common habitats in the region (Kidman Resources, 2017b). The area proposed to be cleared is not likely to represent a significant habitat for fauna indigenous to Western Australia.

A search of available biological databases was undertaken and no Threatened flora have been recorded in the application area (GIS Database). The Level 1 flora and vegetation survey undertaken by Native Vegetation Solutions, did not record species of Threatened flora in the application area (Kidman Resources, 2017b; Native Vegetation Solutions, 2016).

There are no known Threatened Ecological Communities (TECs) located within a 30-kilometre radius of the application area. The southern portion of the application area lies within the buffer zone of the Ironcap Hills vegetation complex, Priority 3 Priority Ecological Community (PEC). The proposed clearing does not intersect with the PEC only the buffer zone, additionally the application does not propose to disturb any banded ironstone formations or vegetation communities reliant on iron stone habitats in which the PEC is conserving (GIS Database).

The application area falls within the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database) in which approximately 97% of the pre-European vegetation remains in Western Australia (Government of Western Australia, 2016). The vegetation within the application area is recorded as:

- 519: Shrublands; mallee scrub, *Eucalyptus eremophila*;
- 8: Medium woodland; salmon gum and gimlet

Over 98% of the pre-European extent of these mapped vegetation associations remain in the Coolgardie bioregion (Government of Western Australia, 2016), therefore the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

There are no permanent watercourses or water bodies mapped in or around the application area (GIS Database). Three minor non-perennial watercourses pass through the application area, however the impacts of the proposed clearing on these watercourses are likely to be minimal.

The proposal is located in the Jilbadji (C Class) Nature Reserve. This reserve is well vegetated and the vegetation within the reserve is contiguous (GIS Database). It is unlikely that the small amount of native vegetation clearing required for the purpose of exploration will cause soil or wind erosion. As the proposal requires minimal disturbance (linear clearing which has previously been cleared) and a small amount of native vegetation clearing, it is unlikely the proposal will change salinity levels, impact nutrient export or soil acidification.

Although the proposed clearing occurs in the Jilbadji Nature Reserve, it is unlikely the clearing will significantly impact on the environmental values of the nature reserve, given the small amount of clearing proposed, the clearing method used and the large size of the nature reserve (approximately 200,000 hectares). The application area has also been used historically for the purpose of mineral exploration activities and has therefore been subjected to minor disturbance. The DBCA approved CMP will be implemented to manage potential and actual impacts to the Jilbadji Nature Reserve (Kidman Resources, 2017a; 2017b).

No Public Drinking Water Source Areas (PDWSA's) are located within or in the vicinity of the application area (GIS Database). There are no permanent watercourses or wetlands located within the application area (GIS Database). The proposed clearing is unlikely to cause deterioration to the quality of surface or underground water.

Drainage generally occurs as sheetwash in proximity to the project area with no defined water courses. The disturbance from the exploration is limited to only 8.15 ha, and spread over a much larger area, so is unlikely to cause or exacerbate the incidence of flooding in the area. The proposal area is located in the well vegetated Jilbadji Nature Reserve, further reducing the likelihood of, or intensity of flooding.

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 at variance to Principle (h), may be at variance to Principles (a) and (b), is not likely to be at variance to Principles (c), (d), (f), (g), (i) and (j), and is not at variance to Principle (e).

Methodology CALM (2002)
DotEE (2017)
Government of Western Australia (2016)
Keighery (1994)
Kidman Resources (2017a)
Kidman Resources (2017b)

Native Vegetation Solutions (2016)
Western Australian Herbarium (1998-)
Western Wildlife (2016)
GIS Database:
- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffered
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There are no Native Title claims over the area under application (DPLH, 2018). 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 (DPLH, 2017). 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 application was advertised on 27 November 2017 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. There were no submissions received.

Methodology DPLH (2017)

4. References

- DPLH (2017) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 11 January 2018).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Coolgardie2 (COO2 – Southern Cross subregion) Department of Conservation and Land Management, Perth, Western Australia.
- DotEE (2017) Department of the Environment and Energy, Australian Heritage Places Inventory, Jilbadji Nature Reserve. <https://dmzapp17p.ris.environment.gov.au/ahpi/action/search/heritage-search/record/RNE9790> (Accessed 22 December 2017).
- Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2016. WA Department of Parks and Wildlife, 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.
- Kidman Resources (2017a) Conservation Management Plan Exploration within Jilbadji Nature Reserve E77/2244. Melbourne, Victoria.
- Kidman Resources (2017b) Purpose Permit Application Assessment of Clearing Principles Texas Exploration Program Clearing on E77/2244. Melbourne, Victoria.
- Native Vegetation Solutions (2016) Level 1 Flora and Vegetation Survey of the Proposed Initial Cheritons and Texas Exploration Drill Lines- Jilbadji Nature Reserve Mt Holland Operation (Tenements E77/2111 & E77/2244). Western Australia Kalgoorlie.
- Western Australian Herbarium (1998 -). FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 10 January 2018).
- Western Wildlife (2016) Texas and Cheritons Tenements, Mt Holland Project Level 1 Fauna Survey 2016. Mahogany Creek Western Australia.

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)
DEE	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 DEE)
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 DEE)
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:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , 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 <i>Wildlife Conservation Act 1950</i> . 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 <i>Wildlife Conservation Act 1950</i> . 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 <i>Wildlife Conservation Act 1950</i> , 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 <i>Wildlife Conservation Act 1950</i> , 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 <i>Wildlife Conservation Act 1950</i> , 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.