



1. Application details

1.1. Permit application details

Permit application No.: 1533/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: View Gold Pty Ltd

1.3. Property details

Property: M36/263
M36/146
M36/319
Local Government Area: Shire Of Leonora
Colloquial name: Bronzewing and Mt McClure Project

1.4. Application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
<p>The vegetation in the application areas is broadly mapped as:</p> <p>Beard Vegetation Association 39: Shrublands; Mulga scrub; and</p> <p>Beard Vegetation Association 107: hummock grasslands, shrub steppe; Mulga and <i>Eucalyptus kingsmillii</i> over hard spinifex (GIS Database).</p>	<p>This clearing permit application includes two separate parcels of land - One at the 'Bronzewing Gold Operation' (approximately 20 hectares) and the other at the 'Mt McClure Gold Operation' (approximately 89 hectares). The proponent has applied for a surplus area to accommodate possible future changes in waste rock landform and pit designs. Clearing will be kept to a minimum as required (Outback Ecology, 2006a).</p>	<p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)</p> <p>to</p>	<p>Ecologia environmental consultants conducted a botanical survey of the Bronzewing tenements in February 1993. Outback Ecology surveyed the proposed Bronzewing - Mt McClure haul road extension area in December 2004 and described the vegetation condition as 'Very Good' to 'Excellent' on either side of the exploration gridline in the area, and 'Degraded' along the gridline (Outback Ecology, 2006a).</p>
<p>Ecologia (1993, as cited in Outback Ecology 2006a) described the vegetation of the Bronzewing tenements as woodlands and shrublands dominated by <i>Acacia</i>, <i>Eremophila</i> and <i>Senna</i> species.</p>	<p>The proposed clearing at Bronzewing involves a cutback of the existing Central Pit and an extension of the Bronzewing - Mt McClure haul road. The haul road extension will take place along an existing exploration gridline in order to minimise vegetation clearing (Outback Ecology, 2006a). The haul road will be used to transport ore (via road train) from Mt McClure to the Bronzewing run-of mine pad for processing (Outback Ecology, 2006b).</p>	<p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)</p>	<p>Formal vegetation surveys have not been conducted within the proposed cutback area of Central pit or immediately surrounding the Cockburn pit; however Outback Ecology personnel have traversed these areas previously and are familiar with both sites. Vegetation within the proposed cutback area of Central pit was described as 'Degraded' to 'Completely Degraded' (Outback Ecology, 2006a). Vegetation surrounding the Cockburn pit was described as 'Degraded'. All vegetation condition descriptions were based on Keighery's rating scale (1994).</p>
<p>In December 2004, Outback Ecology surveyed an area of approximately 35 hectares surrounding (and including) the area proposed for the Bronzewing - Mt McClure haul road development under this application. The intent of the survey was to search for the presence of Declared Rare Flora (DRF) and Priority Flora, whilst describing the main vegetation associations present. The vegetation was broadly described as <i>Acacia aneura</i> and variants 2-7m tall, with a canopy cover of 10-30%. Understorey shrubs were dominated by <i>Ptilotus obovatus</i>, <i>Hakea lorea</i>, <i>Senna</i> species and <i>Eremophila</i> species (Outback Ecology, 2006a).</p>	<p>The proposed clearing at Mt McClure is around the periphery of the existing Cockburn Pit, and will allow for cutback of the pit, development of underground mining operations and extension of the waste rock landform (Outback Ecology, 2006a).</p>		<p>A weed management program is in place to control the spread of weeds at Bronzewing and Mt McClure. This involves quarterly inspections of the sites and spot spraying where required. This program will exist for the life of the mining operations, predicted to be approximately 5 years (Outback Ecology, 2006b).</p>

Outback Ecology conducted a vegetation survey immediately west of the Herbert waste landform in December 2004 (approximately 500m west of the area under application surrounding the Cockburn pit). The vegetation was broadly described as Mulga low woodland to scrub over *Triodia basedowii* Mid-dense hummock grassland.

Weed invasion at Bronzewing is confined to the main waste rock landform. This is not within the proposed clearing area. There are minimal weeds at Mt McClure, however there are isolated outbreaks of Ruby Dock; *Acetosa vesicaria* and Roly Poly; *Salsola tragus* on the Lotus and Herbert waste rock landforms, at tailings storage facility number 1, and on Snowy's Slopes. These weed outbreaks are not within the proposed clearing area (Outback Ecology, 2006b).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**

The proposed clearing area at Central pit (Bronzewing) exists on a former hardstand area that is predominantly cleared. There is some remnant vegetation present, however this is very sparse (Outback Ecology, 2006a). The area proposed for the haul road extension occurs along an existing exploration gridline. Some of the clearing required for the establishment of this haulage route will occur along the previously disturbed gridline. A vegetation survey of the proposed haul road extension area was undertaken by Outback Ecology in December 2004 and no Declared Rare Flora (DRF) or Priority Flora species were identified (Outback Ecology, 2006a). The vegetation was described as *Acacia aneura* and variants 2 -7m tall. This vegetation type is abundant on a regional scale (GIS Database). The proposed clearing for the cutback of Central pit and haul road extension is highly unlikely to impact upon biodiversity of the local or regional area (DEC, 2006).

The area applied to clear surrounding the Cockburn pit (Mt McClure) is severely degraded. The vegetation in this area has been affected by previous exploration activities (Outback Ecology, 2006a). No DRF or Priority Flora species are known from the area, nor are any fauna species of conservation significance (GIS Database). Vegetation surveys of adjacent areas have described the vegetation associations as Mulga woodland and hummock grassland. These vegetation types are common and widespread in the Northern Goldfields (Outback Ecology, 2006a). The proposed clearing surrounding the Cockburn pit is highly unlikely to have any impact upon biodiversity of the local or regional area (DEC, 2006).

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:
- Declared Rare and Priority Flora List - CALM 01/07/05.
- Pre-European Vegetation - DA 01/01
- Threatened Fauna - CALM 30/09/05.
DEC (2006).
Outback Ecology (2006a)

(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.

Comments **Proposal is not likely to be at variance to this Principle**

Ninox Wildlife Consulting undertook fauna assessments in the Bronzewing and Mt McClure project areas in 1989 and 1993. No species listed under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* or the *WA Wildlife Conservation Notice 2006* were recorded (Ninox Wildlife Consulting, 1989; 1993). The following species of conservation significance may be expected to occur in the proposed clearing areas based on known distributions and habitat preferences: Australian Bustard; *Ardeotis australis*, Grey Falcon; *Falco hypoleucos*, Alexandra Parrot; *Polytelis alexandrae*, Long-tailed Dunnart; *Sminthopsis longicaudata* (all listed as P4 on the DEC's Priority Fauna List), Peregrine Falcon, *Falco peregrinus* - listed under Schedule 4 (Other specially protected fauna) of the *WA Wildlife Conservation Notice 2006*, Fork-tailed Swift; *Apus pacificus*, Great Egret; *Ardea alba*, and the Rainbow Bee-eater; *Merops ornatus* (all listed as Migratory under the *EPBC Act 1999*). The Mulgara; *Dasyercus cristicauda* (Vulnerable and Schedule 1) was also listed as potentially occurring (Ninox Wildlife Consulting, 1989; 1993).

The Australian Bustard is a nomadic species inhabiting tussock grasslands, *Triodia* hummock grasslands and low shrublands (Garnett & Crowley, 2000). This species could potentially utilise habitat in the proposed clearing areas, however it would most likely move to adjacent areas of undisturbed land upon the commencement of clearing. The vegetation of the proposed clearing areas (Beard Vegetation Associations 39 and 107) is well represented at the state level, with approximately 100% of the pre-European extent of these vegetation types remaining (Shepherd et al, 2001). The areas proposed to clear are therefore unlikely to represent significant habitat for the Australian Bustard.

The Grey Falcon is sparsely distributed across much of Australia and is not likely to be impacted (Pizzey & Knight, 1997).

The Alexandra Parrot is highly nomadic and has a sporadic occurrence throughout the arid interior of Australia. It occurs on red desert sandplains and is known from the Gibson, Great Victoria and Great Sandy Deserts (Pizzey & Knight, 1997). The degraded vegetation of the application areas is not likely to provide significant habitat for this species.

The Long-tailed Dunnart inhabits rocky scree areas and breakaways, with associated vegetation including hummock grasslands and *Acacia* woodlands (Strahan, 1995). There are no rocky outcrops or breakaways in the proposed clearing areas. It is not likely that the Long-tailed Dunnart utilises habitat in the proposed clearing areas.

The Peregrine Falcon, a wide ranging bird, has little habitat specificity apart from an affinity with cliffs and water (Pizzey & Knight, 1997). As these habitat types do not exist in the application areas, the proposed clearing areas are unlikely to represent significant habitat for this species (Ninox Wildlife Consulting, 1989; 1993).

The Fork-tailed Swift, Rainbow Bee-eater and Great Egret are seasonal visitors to Western Australia, with little habitat specificity apart from the Great Egret (preferring shallow wetlands and mudflats, of which there are none in the proposed clearing areas) (Pizzey & Knight, 1997). The vegetation proposed for clearing does not represent significant habitat for any of these migratory species.

Halpern, Glick, Maunsell (HGM) undertook Mulgara trapping in 1997 in the areas around Charlie's Well, Sister's Well and the Wanjarri border; following the discovery of the Mulgara at nearby Mount Joel. These three locations are 15 - 30km from the proposed clearing areas. These locations were selected for trapping as they occur within the Bullimore Land System, which is recognized as containing suitable Mulgara habitat. The area proposed to be cleared at Bronzewing is not part of this land system, however the proposed clearing at Mt McClure is on land mapped as Bullimore land system. Evidence of Mulgaras in the form of live animal captures, scats, tracks and diggings was recorded at all three trapping locations (HGM, 1997).

The preferred habitat for the Mulgara is open Mulga woodlands (*Acacia aneura*) over mature hummock grasslands (*Triodia basedowii*). Sandplains and dune systems with sandy loams are necessary to enable burrowing (HGM, 1997). There is also evidence to suggest that colonies of Mulgara coincide with watered areas such as paleo-drainage channels or drainage lines (HGM, 1997). The proposed clearing area at Bronzewing does not represent suitable habitat for Mulgara due to the absence of *Triodia basedowii* hummock grassland. Whilst such grasslands are present in the proposed clearing area at Mt McClure, there are no drainage lines present. Open Mulga woodland over mature hummock grassland is widespread in the local and regional area and the degraded vegetation surrounding Cockburn pit is unlikely to represent significant habitat for the Mulgara.

Based on the disturbances that the proposed clearing areas are subject to, it is unlikely that they provide significant habitat for indigenous fauna (DEC, 2006). Furthermore, fauna surveys by Ninox Wildlife Consulting would suggest that no species of conservation significance will be threatened by the proposed clearing.

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology DEC (2006).
DEH (2006).
Garnett & Crowley (2000).
HGM (1997).
Ninox Wildlife Consulting (1989).
Ninox Wildlife Consulting (1993).
Outback Ecology (2006b).
Pizzey & Knight (1997).
Strahan (1995).

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments Proposal is not likely to be at variance to this Principle

A search of the Department of Environment and Conservation's (DEC) Threatened Flora Database was undertaken in December 2004 by Outback Ecology to identify Declared Rare Flora (DRF) or Priority Flora

species in the Bronzewing - Mt McClure area. The search was conducted for the co-ordinates 27°00' - 28°00' S and 120°00' - 121°00' E (covering an area of approximately one million hectares, including the areas applied to clear). No DRF species were identified from the search, however ten Priority Flora species were recorded: *Euryomyrtus inflata* (P1), *Stenanthemum mediale* (P1), *Olearia mucronata* (P2), *Baecka sp. Melita Station* (P3), *Calytrix uncinata* (P3), *Canoparmelia macrospora* (P3), *Grevillea inconspicua* (P4), *Hemigenia exilis* (P4), *Eremophila pungens* (P4) and *Acacia balsamea* (P4). A further three species were identified as potentially occurring within the search area: *Calytrix verruculosa* (P1), *Calytrix erosipetala* (P3) and *Calytrix praecipua* (P3).

There are no known records of DRF or Priority Flora species within 10km of the clearing permit application areas (GIS Database; Outback Ecology, 2006a). Ecologia environmental consultants conducted a botanical survey of the Bronzewing tenements in February 1993, no DRF or Priority Flora species were recorded (Outback Ecology, 2006a).

In December 2004, Outback Ecology surveyed an area of approximately 35ha (surrounding and including the area proposed to be cleared for the Bronzewing - Mt McClure haul road extension). No DRF or Priority Flora species were recorded during this survey.

Outback Ecology undertook another vegetation survey in December 2004, covering the area immediately west of the Herbert Waste Landform (located approximately 500m west of the area proposed to clear at Mt McClure). No DRF or Priority Flora species were recorded during this survey.

Based on known distributions and habitat requirements, *B. sp. Melita Station* is the most likely species identified in the Threatened Flora Database search to utilise habitat within the proposed clearing areas. This species typically grows in Mulga shrublands on dark red rocky soils over ironstone (WA Herbarium, 2006). These habitat conditions are partially present in the application areas. Given the abundance of Mulga shrublands and red rocky soils in the wider region and the lack of any records of *B. sp. Melita Station* from the recent surveys, the areas applied to clear are unlikely to represent significant habitat for the conservation of that species.

The DEC provided advice to the assessing officer (DoIR) on 14 December 2006, stating that the proposed clearing areas do not provide any unique habitats for flora species, and therefore no objections are raised to the proposed clearing (DEC,2006).

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database - Declared Rare and Priority Flora List- CALM 01/07/05.
DEC (2006).
Outback Ecology (2006a).
WA Herbarium (2006).

(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.

Comments Proposal is not likely to be at variance to this Principle

There are no known Threatened Ecological Communities (TEC's) in the IBRA Eastern Murchison subregion (CALM, 2002). The nearest known TEC is approximately 100km southwest of the application areas (GIS Database). No TEC's have been identified by previous botanical surveys within the clearing permit areas, or in the vicinity of these areas (Outback Ecology, 2006a).

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database - Threatened Ecological Communities - CALM 12/04/05.
CALM (2002).
Outback Ecology (2006a).

(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.

Comments Proposal is not at variance to this Principle

The areas applied to clear are within the IBRA Murchison Bioregion (GIS Database). According to Shepherd et al (2001) there is approximately 100% of the pre-European vegetation remaining in this Bioregion.

The vegetation of the application areas is classified as Beard Vegetation Association 39 and 107 (GIS Database). Approximately 100% of Beard vegetation types 39 and 107 remain (Shepherd et al, 2001). The areas proposed to clear do not represent significant remnants of vegetation in the wider regional area. The proposed clearing will not reduce the extent of vegetation types 39 and 107 below current recognised threshold levels, below which species loss increases significantly.

Pre-European	Current	Remaining Area (ha)*	Conservation extent (ha)*	% in IUCN %*	Status**	Class I-IV Reserves*
IBRA Bioregion - Murchison Shire of Leonora		28,120,558	28,120,558	~100%	Least concern	1.1%
Beard Vegetation Associations -						
-39		6,613,602	6,613,496	~100%	Least concern	7.2%
-107		2,815,399	2,815,399	~100%	Least concern	1.7%

* Shepherd et al. (2001)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this principle.

Methodology Department of Natural Resources and Environment (2002)
GIS Database:
- IBRA - EA - 18/10/00.
- Pre-European Vegetation - DA 01/01
Shepherd et al (2001).

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is not likely to be at variance to this Principle

There are no permanent watercourses or wetlands within the area applied to clear at Bronzewing (GIS Database). The proposed haul road extension crosses a broad and shallow drainage line; this is a minor seasonal feature with no channel evident on the ground (Outback Ecology, 2006c). An area of approximately 7.6 hectares will be cleared for the proposed haul road extension (Outback Ecology, 2006a). Some of this area is sparsely vegetated as it occurs on an existing exploration gridline. Mulga (*Acacia aneura*) is the dominant vegetation of this area (including along the drainage line), and is known to be adversely affected by changes in surface hydrology (Outback Ecology, 2006c). To ensure that there is minimal impact upon the flow regimes and vegetation associated with this drainage line, View Gold Pty Ltd has committed to the construction of culverts and/or wash-aways within the proposed haul road where necessary, to allow for adequate sheet flow (Outback Ecology, 2006c).

An existing haul road located approximately 850 metres north of the proposed haul road extension also dissects the drainage line. To date, there appears to have been no adverse affects on the associated vegetation. Furthermore, View Gold Pty Ltd has an abandonment bund in place at the southern end of the Discovery pit (which sits on the edge of the drainage line). This bund acts to divert water around the pit. Again, there appears to have been no long term adverse affect on the vegetation of the drainage line (Outback Ecology, 2006c). Based on the lack of impacts from the two existing structures, the proposed haul road extension is not likely to have any long term adverse affects upon sheet flow of the drainage line or its associated vegetation.

There are no permanent or seasonal watercourses or wetlands within 2km of the proposed clearing area at Mt McClure (GIS Database). Therefore, the vegetation proposed to be cleared is not likely to be riparian, nor is it likely to be acting as a buffer for riparian areas.

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:
- Hydrography, linear - DOE 01/02/04.
- Lakes 1M - GA 01/06/00.
- Rivers 250K - GA.
Outback Ecology (2006a).
Outback Ecology (2006c).

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal may be at variance to this Principle

The proposed pit cutback at Bronzewing is located on land mapped as Jundee land system. The area is characterised by a gently inclined to level plain with an ironstone gravel mantle (DAFWA, 2006). Disturbance to natural surface water flow regime can initiate soil erosion as well as causing water starvation of vegetation down gradient (DAFWA, 2006). The area to be cleared for the Bronzewing development may be at variance with this principle for soil erosion and loss of native vegetation off site unless adequate precautions are taken (DAFWA, 2006).

The clearing proposed for the haul road development at Bronzewing traverses areas of Monk and Desdemona

land systems. The section on Monk land system crosses hard pan plain and a drainage tract. The hard pan plain land unit is not likely to suffer land degradation (DAFWA, 2006). Care will need to be exercised where the haul road crosses the drainage tract to ensure the natural surface water flow regime is maintained, in order to avoid soil erosion and water starvation down gradient (DAFWA, 2006). The minor section of the proposed haul road extension on the Desdemona land system is unlikely to be a land degradation hazard (DAFWA, 2006).

The proposed clearing area at Mt McClure is on land mapped as Bullimore land system. Soils are likely to be deep sandy surfaced red earth supporting Mulga, wanderrie grasses and spinifex. This land system is not regarded as being prone to soil erosion and the proposed area to be cleared at Mt McClure is unlikely to be at variance to this principle (DAFWA, 2006).

Based on the above, the proposed clearing may be at variance to this principle for the clearing areas located on the Jundee land system at Bronzewing.

In order to minimise soil erosion, vegetation loss and reinstate pre-disturbance surface water flow and sheetflow regimes at Bronzewing, View Gold Pty Ltd will replicate natural ground surface levels as much as practicable during rehabilitation (Outback Ecology, 2006b). Where necessary, culverts and spoon drains will be installed along roads to minimise erosion (Outback Ecology, 2006b). This will be a legally binding condition as per the Mining Proposal (which is yet to be approved), managed under the *Mining Act 1978* (Outback Ecology, 2006b). In addition to minimising erosion, such measures will also ensure that natural surface water flow regimes are maintained and water starvation of vegetation down gradient does not occur (Outback Ecology, 2006c).

Methodology DAFWA (2006).
Outback Ecology (2006b).
Outback Ecology (2006c).

(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.

Comments Proposal is not likely to be at variance to this Principle

The Wanjarri (A Class) Nature Reserve, covering an area of approximately 53,000ha, is located approximately 8.5km west of the area applied to clear at Mt McClure, and approximately 12.5km west of the area applied to clear at Bronzewing (GIS Database). There are no other conservation areas nearby.

The proposed clearing areas are not likely to act as significant remnants, buffers, or ecological linkages to the Wanjarri Nature Reserve given that they have been historically disturbed by mining activities and the surrounding landscape has not been extensively cleared.

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database- CALM Managed Lands and Waters - CALM 01/07/05.

(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.

Comments Proposal is not likely to be at variance to this Principle

There are no permanent watercourses or wetlands in close proximity to the areas applied to clear (GIS Database). The areas under application are not within a Public Drinking Water Source Area (GIS Database). The proposed clearing of sparse and degraded vegetation around two existing mine pits is not likely to reduce surface water quality on or off site. The proposed clearing of a small area of Mulga vegetation along the proposed haul road extension is also unlikely to have a significant impact upon water quality.

Groundwater quality in the Bronzewing and Mt McClure area has historically been determined by collection of water samples from a series of monitoring bores in the area. Groundwater surrounding the laterite pit at Bronzewing (approximately 1km north of the proposed clearing at Central pit) was last measured in September 2005 (Outback Ecology, 2006b). Groundwater quality was measured from a bore immediately southeast of Cockburn pit in December 2005 (Outback Ecology, 2006b). Given the scale of clearing that has already taken place at Bronzewing and Mt McClure, additional clearing of sparse vegetation is not likely to significantly alter groundwater levels and/or quality.

View Gold Pty Ltd will continue to monitor groundwater levels and quality characteristics as per its current groundwater monitoring program. Groundwater abstraction for mineral processing and domestic use will continue in accordance with groundwater licences GWL00104591 and GWL110572, which are administered by the Department of Water (Outback Ecology, 2006b). Groundwater abstraction is more likely to result in significant changes to the water table and/or water quality than the proposed clearing.

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:
- Hydrography, linear - DOE 01/02/04.

- Public Drinking Water Source Areas (PDWSAS) - DOE - 07/02/06.
 Outback Ecology (2006b).

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposal is not likely to be at variance to this Principle

The average annual rainfall at Lawlers (the closest meteorological recording station to the areas applied to clear) is 208.2mm (Outback Ecology, 2006a). Average annual evaporation in the proposed clearing areas is approximately 3,600mm (GIS Database). It is therefore expected that there would be little surface water flow during normal seasonal rains.

There are no permanent watercourses in the vicinity of the application area, and the clearing of 166 hectares within the Lake Carey Catchment (17,580,539 hectares) is unlikely to increase the incidence or intensity of flooding (GIS Database).

Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:

- Evaporation Isopleths - BOM 09/98
- Hydrographic Catchments - Catchments - DOE 23/3/05..
- Hydrography, linear - DOE 01/02/04.

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

Comments

There are no Native Title Claims over the areas under application (GIS Database).

There are no known Sites of Aboriginal Significance within the areas applied to clear (GIS Database). 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.

The proposed expansions of the Bronzewing-Mt McClure Project are subject to the *Mining Act 1978* approval process. It is the proponent's responsibility to liaise with the Department of Environment and Conservation 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.

Methodology GIS Database:

- Aboriginal Sites of Significance - DIA 04/07/02.
- Native Title Claims - DLI 19/12/04.

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mineral Production	Mechanical Removal	166	Grant	<p>The clearing principles have been addressed and the proposal is not at variance to principle e and not likely to be at variance to principles a, b, c, d, f, h, i and j. The proposal may be at variance to principle g. The assessing officer is satisfied that the erosion mitigation measures to be agreed to by View Gold Pty Ltd under the <i>Mining Act 1978</i> will address the issues raised in the assessment. The assessing officer therefore recommends that the permit should be granted, subject to the following conditions:</p> <ol style="list-style-type: none"> 1. The Permit Holder shall record the following for each instance of clearing: <ol style="list-style-type: none"> a) the location of where the clearing occurred, expressed as grid coordinates using the Geocentric Datum of Australia 1994 coordinate system; b) the size of the area cleared in hectares; c) the dates on which the area was cleared; d) the area rehabilitated in hectares; e) the method of clearing; f) the purpose of clearing. 2. The Permit Holder shall provide a report to the Director, Environment, Department of Industry and Resources by 28 February each year for the life of the permit setting out the records required under condition 1 of this permit in relation to clearing carried out between 1 January and 31 December of the previous year. This report can be included as an addendum to the Annual Environmental Report.

Explanatory Notes:

1. In this permit **Annual Environmental Report** means a report produced as a requirement of tenement conditions under the *Mining Act 1978*.

5. References

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- DAFWA (2006) Land degradation assessment report. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received 4 December 2006. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia.
- DEC (2006) Biodiversity advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received 14 December 2006. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia.
- DEH (2006) Species Profile and Threats Database: *Leporillus apicalis* - Lesser Stick-nest Rat. <http://www.deh.gov.au/biodiversity/threatened/species/index.html>
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- HGM (1997) Barwidgee Pastoral Lease Mulgara (*Dasycercus cristicauda*) Survey. November 1997.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
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- Ninox Wildlife Consulting (1993) Vertebrate Fauna Assessment of the Proposed Bronzewing Gold Project.
- Outback Ecology (2006a) Application for a Purpose Permit to Clear Native Vegetation for the Bronzewing - Mt McClure Project.
- Outback Ecology (2006b) Bronzewing - Mt McClure Project: Mining Proposal to undertake a cutback of the Central Pit at Bronzewing and progress underground mining of Cockburn Deeps at Mount McClure. February 2006.
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- Strahan, R. (1995) The Mammals of Australia, Reed Books, NSW.
- Western Australian Herbarium (2006). Florabase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.calm.wa.gov.au/>

6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAFWA	Department of Agriculture and Food, Western Australia.
DA	Department of Agriculture, Western Australia.
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DoE), Western Australia.
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia.
DoE	Department of Environment, Western Australia.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System.
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	Rights in Water and Irrigation Act 1914, Western Australia.
s.17	Section 17 of the Environment Protection Act 1986, Western Australia.
TECs	Threatened Ecological Communities.

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
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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 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 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)

- EX 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:
(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.