



1. Application details

1.1. Permit application details

Permit application No.: 1728/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Western Power

1.3. Property details

Property:

- STATE FOREST 14 (NANGA BROOK 6215)
- STATE FOREST 15 (COLLIE (S))
- LOT 7 ON PLAN 20237 (Lot No. 7 WILLIAMS-COLLIE PALMER 6225)
- UNALLOCATED CROWN LAND (PALMER 6225)
- ROAD RESERVE (PALMER 6225)
- LOT 782 ON PLAN 232895 (PALMER 6225)
- STATE FOREST 24 (House No. 2067 WILLIAMS-COLLIE WILLIAMS 6391)
- LOT 1117 ON PLAN 232895 (Lot No. 1117 WILLIAMS-COLLIE PALMER 6225)
- LOT 1120 ON PLAN 232895 (BUCKINGHAM 6225)
- LOT 3677 ON PLAN 143706 (YOURDAMUNG LAKE 6225)
- LOT 2190 ON PLAN 130583 (YOURDAMUNG LAKE 6225)
- LOT 4128 ON PLAN 149858 (YOURDAMUNG LAKE 6225)
- LOT 1592 ON PLAN 122667 (YOURDAMUNG LAKE 6225)
- LOT 4126 ON PLAN 149858 (YOURDAMUNG LAKE 6225)
- LOT 5506 ON PLAN 240272 (YOURDAMUNG LAKE 6225)
- ROAD RESERVE (YOURDAMUNG LAKE 6225)
- WELLINGTON LOCATION 1250 (YOURDAMUNG LAKE 6225)
- WELLINGTON LOCATION 5505 (UPPER MURRAY 6390)
- UNALLOCATED CROWN LAND (UPPER MURRAY 6390)
- UNALLOCATED CROWN LAND (UPPER MURRAY 6390)
- LOT 87 ON PLAN 25746 (UPPER MURRAY 6390)
- LOT 136 ON PLAN 27881 (UPPER MURRAY 6390)
- MURRAY LOCATION 1831 (WURAMING 6390)
- MURRAY LOCATION 567 (WURAMING 6390)
- MURRAY LOCATION 709 (House No. 447 WAGERUP-WILLOWDALE WAGERUP 6215)
- LOT 3 ON PLAN 16499 (WURAMING 6390)
- LOT 703 ON PLAN 228588 (House No. 5353 PINJARRA-WILLIAMS MARRADONG 6390)
- LOT 2123 ON PLAN 220066 (WURAMING 6390)
- LOT 1808 ON PLAN 220066 (BODDINGTON 6390)
- MURRAY LOCATION 1040 (House No. 447 WAGERUP-WILLOWDALE WAGERUP 6215)
- MURRAY LOCATION 1537 (House No. 447 WAGERUP-WILLOWDALE WAGERUP 6215)
- ROAD RESERVE (WURAMING 6390)

Local Government Area: Shire Of Boddington & Shire Of Collie
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
21.2		Cutting	Infrastructure Maintenance

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
Beard Vegetation Association 3: Medium forest; jarrah-marri	The majority of the vegetation within the existing Transmission Line Corridor is of Degraded -	Degraded: Structure severely disturbed; regeneration to good condition requires	Vegetation condition was determined from Maunsell (2006). Flora, Vegetation, Fauna and Dieback Survey; Wells to Shotts Terminal Transmission Line and Wells Terminal Substations Site.

Beard Vegetation Association 1114; Shrublands tree-heath; paperbark over tea-tree thickets

Mattiske Vegetation Class:

Coolakin (Ck): Woodland of *Eucalyptus wandoo* with mixtures of *Eucalyptus patens*, *Eucalyptus marginata* subsp. *thalassica* and *Corymbia calophylla* on the valley slopes in arid and perarid zones.

Dwellingup (D1): Open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla* on lateritic uplands in mainly humid and subhumid zones.

Dwellingup 2 (D2): Open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla* on lateritic uplands in subhumid and semiarid zones.

Dwellingup 4 (D4): Open forest to woodland of *Eucalyptus marginata* subsp. *thalassica*-*Corymbia calophylla* on lateritic uplands in semiarid and arid zones.

Goonaping (G): Mosaic of open forest of *Eucalyptus marginata* subsp. *marginata* (humid zones) and *Eucalyptus marginata* subsp. *thalassica* (semiarid to perarid zones) on the sandy-gravels, low woodland of *Banksia attenuata* on the drier sandier sites (humid to perarid zones) with some *Banksia menziesii* (northern arid and perarid zones) and low open woodland of *Melaleuca preissiana*-*Banksia littoralis* on the moister sandy soils (humid to perarid zones).

Murray 2 (My2): Open forest of *Eucalyptus marginata* subsp. *thalassica*-*Corymbia calophylla*-*Eucalyptus patens* and woodland of *Eucalyptus wandoo* with some *Eucalyptus accedens* on valley slopes to woodland of *Eucalyptus rudis*-*Melaleuca raphiophylla* on the valley floors in semiarid and arid zones.

Pindalup (Pn): Open forest of *Eucalyptus marginata* subsp. *thalassica*-*Corymbia calophylla* on slopes and open woodland of *Eucalyptus wandoo* with some *Eucalyptus patens* on the lower slopes in

Good condition despite the disturbance from infrastructure including regular corridor maintenance. Few areas of the Transmission Line Corridor are completely void of remnant vegetation and such areas are typically located where the transmission line traverses pasture or fire breaks on farming properties (Maunsell, 2006).

intensive management (Keighery 1994)

semiarid and arid zones.

Swamp (S): Mosaic of low open woodland of *Melaleuca preissiana*-*Banksia littoralis*, closed scrub of Myrtaceae spp., closed heath of Myrtaceae spp. and sedgelands of *Baumea* and *Leptocarpus* spp. on seasonally wet or moist sand, peat and clay soils on valley floors in all climatic zones.

Yarragil 1 (Yg1): Open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla* on slopes with mixtures of *Eucalyptus patens* and *Eucalyptus megacarpa* on the valley floors in humid and subhumid zones.

Yarragil 2 (Yg2): Open forest of *Eucalyptus marginata* subsp. *thalassica*-*Corymbia calophylla* on slopes, woodland of *Eucalyptus patens*-*Eucalyptus rudis* with *Hakea prostrata* and *Melaleuca viminea* on valley floors in subhumid and semiarid zones.

Hedde Vegetation Complexes:

Coolakin Complex in Low Rainfall: Woodland

Pindalup and Yarragil Complex In Low To Medium Rainfall: Open forest and woodland

Dwellingup and Hester Complex In High Rainfall - Central And South: Open Forest

Swamp Complex: Low Open Woodland To Sedgelands

Dwellingup Yalanbee And Hester Complex In Low To Medium Rainfall: Open Forest

Dwellingup Complex In Medium To High Rainfall: Open Forest

Murray An Bindoon Complex In Low To Medium Rainfall: Open Forest To Woodland

Murray Complex In Medium To High Rainfall: Open Forest To Fringing Woodland

Yarragil Complex (Minimum Development Swamps) In Medium To High Rainfall: Open Forest

Yarragil Complex (Maximum Development Swamps) In Medium To High Rainfall: Open Forest

See Above

A large proportion of the existing Transmission Line Corridor is completely void of remnant vegetation and traverses a number of farming areas and pasture areas. Areas considered to be completely Degraded and Completely Degraded-Good are areas that have been cleared for firebreaks and paddocks (Maunsell, 2006).

Completely Degraded: See Above
No longer intact; completely/almost completely without native species (Keighery 1994)

See Above

Vegetation condition within the existing Transmission Line Corridor ranges from completely degraded to good despite the disturbance from infrastructure including regular corridor maintenance. The Transmission Line Corridor consists largely of regrowth vegetation (Maunsell, 2006).

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)

See Above

Beard Vegetation Association 3: Medium forest; jarrah-marri

Beard Vegetation Association 1114: Shrublands tree-heath; paperbark over tea-tree thickets

Areas of largely undisturbed vegetation are considered to be in excellent condition (Maunsell, 2006).

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)

Vegetation condition was determined from Maunsell (2006). Flora, Vegetation, Fauna and Dieback Survey: Wells to Shotts Terminal Transmission Line and Wells Terminal Substations Site.

Mattiske Vegetation Class:

Coolakin (Ck): Woodland of *Eucalyptus wandoo* with mixtures of *Eucalyptus patens*, *Eucalyptus marginata* subsp. *thalassica* and *Corymbia calophylla* on the valley slopes in arid and perarid zones.

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Dwellingup 4 (D4): Open forest to woodland of *Eucalyptus marginata* subsp. *thalassica-Corymbia calophylla* on lateritic uplands in semiarid and arid zones.

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(northern arid and perarid zones) and low open woodland of *Melaleuca preissiana*-*Banksia littoralis* on the moister sandy soils (humid to perarid zones).

Murray 2 (My2): Open forest of *Eucalyptus marginata* subsp. *thalassica*-*Corymbia calophylla*-*Eucalyptus patens* and woodland of *Eucalyptus wandoo* with some *Eucalyptus accedens* on valley slopes to woodland of *Eucalyptus rudis*-*Melaleuca raphiophylla* on the valley floors in semiarid and arid zones.

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Swamp (S): Mosaic of low open woodland of *Melaleuca preissiana*-*Banksia littoralis*, closed scrub of Myrtaceae spp., closed heath of Myrtaceae spp. and sedgelands of *Baumea* and *Leptocarpus* spp. on seasonally wet or moist sand, peat and clay soils on valley floors in all climatic zones.

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Yarragil 2 (Yg2): Open forest of *Eucalyptus marginata* subsp. *thalassica*-*Corymbia calophylla* on slopes, woodland of *Eucalyptus patens*-*Eucalyptus rudis* with *Hakea prostrata* and *Melaleuca viminea* on valley floors in subhumid and semiarid zones.

Heddl Vegetation Complexes:

Coolakin Complex in Low Rainfall: Woodland

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Dwellingup Complex In Medium To High Rainfall: Open Forest

Murray An Bindoon Complex In Low To Medium Rainfall: Open Forest To Woodland

Murray Complex In Medium To High Rainfall: Open Forest To Fringing Woodland

Yarragil Complex (Minimum Development Swamps) In Medium To High Rainfall: Open Forest

Yarragil Complex (Maximum Development Swamps) In Medium To High Rainfall: Open Forest

See above

Excluding the mowed Transmission Line Corridor, the condition of the majority of the vegetation is Very Good with little weed invasion or disturbance (Maunsell, 2006).

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)

See above

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 proposal is to clear 21.2 hectares (ha) of native vegetation within the Shires of Boddington and Collie for the construction of new infrastructure associated with a Western Power 330kV transmission line upgrade to meet the increased power demand of the re-opened Boddington Gold Mine.

A Flora, Vegetation, Fauna and Dieback Survey of the application area undertaken in June 2006 by Maunsell Australia Pty Ltd. identified 78 vascular flora species within the application area. No Declared Rare Flora (DRF) or Priority Flora were identified within the area proposed to be cleared either by the Maunsell Survey (2006) or Biodiversity Coordination Section, DEC (2007).

The survey recorded a total of twelve vegetation communities, with a high proportion of the vegetation identified as Community J1, typical Jarrah Forest on lateritic gravel soils. No known Threatened Ecological Communities (TECs) or Threatened Plant Communities were identified.

The Flora, Vegetation, Fauna and Dieback Survey (Maunsell, 2006) found the majority of the application area to be within a Disease Risk Area, with *Phytophthora cinnamomi* and/or *Armillaria luteobubalina* apparent in at least thirty-one locations within all three of the survey areas.

The vegetation within the proposed clearing ranged from completely degraded to very good/excellent (Maunsell, 2006). The areas of vegetation considered to be degraded are areas that have been previously cleared for firebreaks and paddocks, while largely undisturbed areas are in very good to excellent condition (Maunsell, 2006). Vegetation types are generally well represented with a conservation status of 'least concern' (Department of Natural Resources and Environment, 2002).

Although the vegetation within the proposed clearing was found to range between completely degraded and very good/excellent condition, the vegetation type of the proposed clearing is regionally extensive in size, and not considered to be representative of an area of outstanding biodiversity in the Bioregion.

The proposal is therefore unlikely to be at variance to this principle. However, given that a proportion of the vegetation impacted by the proposed clearing is considered to be in excellent condition, the permit includes management conditions aimed at avoiding and minimising the clearing of native vegetation, ameliorating the risk of dieback and weed invasion, and offsetting the loss of biodiversity.

Methodology Maunsell (2006)
Department of Natural Resources and Environment (2002)
DEC (2007)

(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 may be at variance to this Principle**
Biodiversity Coordination Section (BCS)(DEC, 2007) advised:

The area proposed to be cleared appears to be in a 'degraded to good' condition (Keighery, 1994), consisting mainly of regrowth species. The proposal to clear a 60m wide corridor through state forest has the potential to impact numerous species through habitat loss, fragmentation and increased predation. DEC Senior Zoologist (2007) advised that the species most likely to be affected was the Brush-tailed Phascogale, but that the effect may only be minimal as the actual area to be cleared is patchy regrowth, and lacking the preferred wood hollow habitats of brush-tailed Phascogales.

With regard to the possible increase in predation as a result of clearing, DEC Senior Zoologist (2007) advised that predation would not be severe due to the distance between nearby farming areas and the proposed clearing. However, BCS (2007) advised that a baiting programme be implemented for 12 months after the clearing to control foxes along the corridor.

DEC Senior Zoologist (2007) advised that Numbats were unlikely to occur within the local area as it is not a release site for numbats, and the known records for numbats within this area are over 20 years old.

The fragmentation caused by the clearing may have some effect upon invertebrates, reptiles and small mammals whose home range is quite small and that require leaf litter and vegetation for habitat and refuge. The project briefing produced by Western Power (2007) stated that the vegetation will be slashed, leaving some remaining groundcover which may provide a level of protection for these species before regrowth occurs.

BCS (2007) has recommended that the impact on fauna and on conservation areas could be minimised with a staged approach to the clearing.

Due to the possible effect on Brush-tailed Phascogales and the likely increase in predation, this proposal may be at variance to this principle.

Methodology DEC (2007)
Keighery (1994)
Western Power (2007)

(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 Flora, Vegetation, Fauna and Dieback Survey of the application area undertaken in June 2006 by Maunsell Australia Pty Ltd. identified 78 vascular flora species within the application area. No Declared Rare Flora (DRF) or Priority Flora were identified within the area proposed to be cleared.

Similarly, Biodiversity Coordination Section (DEC, 2007) advised that there are no known records of Declared Rare Flora within the local area. The Maunsell Survey (2006) observed DRF markers within the proposed clearing area. This was followed up with a query to the Manager, Species and Communities Branch, DEC who advised that there were no known records of DRF within that area despite the presence of DRF markers.

Given the above, the proposal is not likely to be at variance to this principle.

Methodology Maunsell (2006)
DEC (2007)
GIS Database:
- Declared Rare and Priority Flora List - CALM 01/07/05

(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 (TECs) within a thirty kilometre radius of the area under application. It is unlikely that the proposed clearing is necessary for the maintenance of a threatened ecological community.

Methodology GIS Database:
- Threatened Ecological communities - CALM 12/04/05

(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			Conservation Status**
	Pre-European (ha)*	Current Extent (ha)*	Remaining (%)*	
IBRA Bioregion:				
Jarrah Forest	4,503,156	2,624,301	58.3	Least concern
Shires:				
Boddington	195,281	138,327	70.8	Least concern
Collie	172,072	161,845	94.1	Least concern
Beard Unit 3	3,046,385	2,197,837	72.1	Least Concern
Beard Unit 1114	23,869	17,938	75.2	Least Concern
Mattiske Veg:				
Coolakin (Ck)	1,338,992	573,908	42.9	Depleted
Dwellingup (D1)	2,082,806	1,936,288	93.0	Least concern
Dwellingup 2 (D2)	860,918	779,190	90.5	Least concern
Dwellingup 4 (D4)	1,324,003	1,211,559	91.5	Least concern
Goonaping (G)	272,624	218,911	80.3	Least concern
Murray 2 (My2)	593,148	440,381	74.2	Least concern
Pindalup (Pn)	1,666,912	1,343,956	80.6	Least concern
Swamp (S)	536,628	422,553	78.7	Least concern
Yarragil (Yg1)	800,603	703,654	87.9	Least concern
Yarragil 2 (Yg2)	502,648	481,574	95.8	Least concern
Hedde Veg:				
Dwellingup Complex	83,660	71,067	74.7	Least concern

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** Within the Intensive Landuse Zone

The area under application is located in the Shires of Boddington and Collie and within the Jarrah Forest Bioregion. The extent of pre-European vegetation within these areas is 70.8%, 94.1% and 58.3% respectively (Shepherd et al., 2001).

The vegetation proposed to be cleared is a component of Beard Vegetation Associations 3 and 1114 (Hopkins et al., 2001). The extent of pre-European vegetation remaining within these vegetation types is 72.1% and 75.2% respectively (Shepherd et al., 2001). Both have a conservation status of 'Least Concern' (Department of Natural Resources and Environment, 2002).

With one exception, the pre-European extent remaining of the Mattiske vegetation types covering the application area ranges from 74.2% to 95.8% (Mattiske Consulting, 1998) and have a conservation status of 'least concern' (Department of Natural Resources and Environment, 2002). Mattiske vegetation class Coolakin (Ck) is classified as being 'depleted' (Department of Natural Resources and Environment, 2002) with 42.9% of pre-European vegetation remaining (Mattiske Consulting, 1998).

Hedde Dwellingup Complex was the only Hedde vegetation type with available data, having a conservation status of 'least concern' (Department of Natural Resources and Environment, 2002) and 84.9% of its pre-European extent remaining (Hopkins et al., 2001).

On the basis that the pre-European extent of the vegetation associations meets the National Objectives Targets for Biodiversity Conservation 2001 - 2005, being 30% of that present pre-1750, this proposal is not at variance to this principle.

Methodology Shepherd et al (2001)
Hopkins et al., 2001
Mattiske Consulting (1998)
Department of Natural Resources and Environment (2002)
GIS Database:
- Pre-European Vegetation - DA 10/01

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Mattiske Vegetation - CALM 24/3/98

(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 at variance to this Principle

The proposed clearing will be undertaken within the riparian zones of water courses including Long Gully, Murray River (a major perennial watercourse), Bell Brook, Opossum Spring Gully, Harris River, Bingham River, Poilard Brook, Thirty-four Mile Brook and numerous smaller watercourses. The clearing may also affect tributaries of these rivers. Additionally, the application area passes through Yourdamung Lake. The clearing under application is therefore considered to be at variance to this principle.

To mitigate any potential impacts of the clearing on riparian vegetation, while acknowledging the need to upgrade the power supply to meet increasing demand from the re-opened Boddington Gold Mine, the proposed clearing will be carried out in accordance with a condition imposed on the permit requiring that clearing of vegetation be avoided, and where this is not possible, minimised. In addition, dieback and weed management conditions will be placed on the permit to ensure the values of the identified watercourses are maintained.

- Methodology** GIS Database:
- Rivers 250K - GA
 - Hydrography, Linear - DOE 1/2/04
 - Lakes, 1m - GA 01/06/00

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

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

The proposed clearing falls within an area of shallow undulating gradients and occupies the mid to upper slopes in the landscape. The region has a mean annual rainfall of 900 - 1000mm, and groundwater salinity has been recorded as ranging from 500 - 3000mg/L TDS (Total Dissolved Solids).

Western Power proposes to mulch unsalvageable timber removed during the clearing process to be used as erosion control. Excess mulch is to be removed from site to prevent a combustible fuel risk (Western Power, 2007).

Relative to the information above, the proposed clearing of native vegetation is unlikely to increase the risk of salinity, wind erosion, water erosion or water logging.

- Methodology** Western Power (2007)
GIS Database:
- Topographic Contours, Statewide - DOLA 12/09/02
 - Rainfall, Mean Annual - BOM 30/09/01
 - Groundwater Salinity, Statewide - 22/02/00

(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 at variance to this Principle

Biodiversity Coordination Section, DEC (2007) advised:

The proposed clearing runs directly through Dwellingup State Forest, Muja State Forest, Lane Poole Reserve and the proposed Jarrah Forest National Park. The majority of the project is located within a known Disease Risk Area (DRA). The area under application has been mapped by Glevan Consulting for evidence of the water mould disease *Phytophthora cinnamomi* and soil-borne fungus *Armillaria luteobubalina*. Thirty-one different sites along the proposed clearing area were identified with disease, with the remaining areas described as disease free, unmappable or uninterpretable. A DRA is defined by DEC as being 'any area of public land where the Executive Director considers that the earth, soil or trees may be, or may become infected with a forest disease'. It is understood that the proponent's Management Plan is inclusive of Dieback Management strategies, however should further guidance be required it is requested that the proponent be directed towards the DEC document 'Best Practice Guidelines for the Management of *Phytophthora cinnamomi*'.

Edge effects into the conservation areas will be doubled as the clearing will create a corridor. As a result, this may cause possible weed and predator invasion, as well as loss of biodiversity.

The proposed clearing will also result in fragmentation through the conservation areas, with invertebrates, reptiles and small mammals particularly affected.

BCS (2007) has recommended that the impact on fauna and on conservation areas could be minimised with a

staged approach to the clearing.

As per DEC 'Best Practice Guidelines for the Management of *Phytophthora cinnamomi*' it is highly recommended that any clearing and construction be avoided when the soil is wet and that any areas not mapped as disease free be treated as though they were infected. Due to the prevalence of disease within this area it is likely that the disease will be spread unless stringent precautions are adhered to. As the proposed clearing has the possibility to aid in the spread of disease, in addition to the increased edge effects and fragmentation of conservation areas, it is likely that the proposed clearing would be at variance to this principle.

Dieback management conditions imposed include the avoidance of moving soil in wet conditions.

Methodology DEC (2007)
GIS Database:
- CALM Managed Lands and Waters - CALM 1/07/05

(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 at variance to this Principle

The application area lies within the Peel Estuary_Murray River and Wellington Dam_Collie River Catchments. The static water level at a Department of Water Monitoring Bore located 15.4kms east of the proposed clearing was 20.52m from TOC (Top of Casing) on 30/11/2006. The region has an annual rainfall of 900 - 1000mm, and the application area occupies the mid to upper slopes in a landscape of shallow topographical gradients.

The area under application has been identified as falling within the Wellington Dam Catchment Area and the Harris River Dam Catchment Area, declared as Public Drinking Water Source Areas under the Country Areas Water Supply Act 1947 (CAWS). Harris River Dam Catchment Area has a Priority 1 (P1) Classification, where the provision of the highest quality public drinking water is the prime beneficial land use. P1 areas are managed in accordance with the principle of risk avoidance, therefore land development is generally not permitted.

The Wellington Dam Catchment Area and the Harris River Dam Catchment Area both lie within Zone A of the Country Areas Water Supply. Clearing for power lines, roads and other services by Government Departments may be granted for the minimum essential clearing on the condition that an equivalent area within Zone A (unless otherwise specified) is reforested and an Agreement to Reserve may be requested.

Given the above, the proposal is at variance to this principle. To mitigate any loss of amenity to Zone A of the Country Areas Water Supply within the Wellington Dam Catchment Area and the Harris River Dam Catchment Area, the permit includes management conditions aimed at avoiding and minimising the clearing of native vegetation, ameliorating the risk of dieback and weed invasion, and offsetting the loss of biodiversity.

Methodology GIS Database:
- Hydrographic Catchments - Catchments - DOE 23/03/05
- Rainfall, Mean Annual - BOM 30/09/01
- Groundwater Salinity, Statewide - 22/02/00
- Public drinking Water source Areas - (PDWSAs) - DOW
- CAWSA Part 11A Clearing control Catchments - DOW

(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 proposed clearing falls within an area of shallow undulating gradients ranging from 175mAHD at the lowest point to 365m AHD at the highest point, and occupies the mid to upper slopes in the landscape. The region has a mean annual rainfall of 900 - 1000mm.

Although clearing of vegetation in this landscape could increase surface runoff which would contribute to stream flows, it is unlikely to exacerbate the intensity of flooding within the local area.

Methodology GIS Database:
- Topographic Contours, Statewide - DOLA 12/09/02
- Rainfall, Mean Annual - BOM 30/09/01

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

Comments

No submissions have been received for this proposal.
There is a Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian Newspaper constitutes legal notification of the Native Title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Eight Aboriginal Sites of Significance are listed within the area under application. These are Bolton Pools, Corridor 05, Collie River Waugyl, Dukatj (34 Mile) creek, Ferguson river, Harris River, Murray River and Preston River. It is the responsibility of the proponent to ensure that no Aboriginal Sites of Significance are damaged through the clearing process. The permit holder will be notified of their obligations under the Aboriginal Heritage Act 1972 in the cover letter to this permit.

Biodiversity Coordination Section (DEC, 2007) has recommended that the proponent implement a 12 month baiting program once the clearing has been completed in order to control foxes along the corridor. The permit holder will be notified of this recommendation in the cover letter to this permit.

Biodiversity Coordination Section (DEC, 2007)

GIS Database:

- Native Title Claims - DLI 07/11/05

- Aboriginal Sites of Significance - DIA

Methodology

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Infrastructure Cutting Maintenance		21.2	The assessable criteria have been addressed and the proposal is not at variance to Principle (e); is not likely to be at variance to Principles (a), (c), (d), (g) and (j); may be at variance to Principle (b); and is at variance to Principles (f), (h) and (i). Principles (b), (f), (h) and (j): To mitigate any potential environmental impacts, the permit includes management conditions aimed at avoiding and minimising the clearing of native vegetation, ameliorating the risk of dieback and weed invasion, and offsetting the loss of biodiversity.

5. References

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- 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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6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)

