



1. Application details

1.1. Permit application details

Permit application No.: 2304/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Telstra Corporation Ltd

1.3. Property details

Property: LOT 1 ON DIAGRAM 34033 (House No. 620 GNANGARA LANDSDALE 6065)
 Local Government Area: City Of Swan & City Of Wanneroo
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.3		Mechanical Removal	Building or Structure

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
BASSENDAN COMPLEX CENTRAL AND SOUTH : Vegetation ranges from woodland of <i>E. marginata</i> - <i>C. fraseriana</i> - <i>Banksia</i> spp. to low woodland of <i>Melaleuca</i> species, and sedgeland on the moister sites. This area includes the transition of <i>E. marginata</i> to <i>E. tottiana</i> in the vicinity of Perth. (Shepherd, 2006)	The applied area of 0.3ha is located within Lot 1, a 287ha site. The purpose of the clearing is for a building or structure. Applied area is separated by the intersection of fire breaks resulting in the applied area being 4 small pockets of land subject to edge effects.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition of the native vegetation under application was sourced from the Site Inspection (2008). The condition ranged from very good to excellent with an overall vegetation condition of Excellent.

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**
 BSD Consultants (2002) conducted a flora and fauna survey of the entire Telstra Perth International Telecommunications Centre (PITC) 287ha property (Lot 1), which includes the applied area (0.3ha), during Spring 2001. A total of 178 flora Taxa representing 48 families were recorded from the Telstra PITC area including two records of declared rare flora and 10 records of priority species. Also 40 species of birds, seven species of reptile and four mammal species have been recorded across the Telstra site.

The applied area is divided by a North/South fire break as well as an East/ West fire break resulting in a variation in vegetation. East of the N-S fire break is *Banksia* Woodland/Low Forest in excellent condition with *Banksia* sp. Dominating the canopy are *Eucalyptus marginata*, *Nuytsia floribunda* and *Melaleuca pressiana*. The Under story is low heath with *Xanthorrea* sp., *Regelia ciliata*, *Scholtzia involucrate* and *Verticordia nitens* being the common understorey species. (Site Inspection, 2008)

West of the N-S fire break the vegetation condition is excellent *Melaleuca* Open Woodland over heath and Heath. The Heath vegetation is fairly dense and is characterised by *Melaleuca pressiana*, *Xanthorrhoea preissii*, *Jacksonia furcellata*, *Dasyogon bromeliifolius* and *Hypocalymma angustifolium*. (Site Inspection, 2008)

The edges of the applied area have been invaded by weed species *Gladiolus caryophyllaceus* and *Ehrharta calycina*, though currently in very low densities. (Site Inspection, 2008)

Given the close proximity of the applied area to intersecting fire breaks and the relatively small area applied to be cleared (0.3ha), the clearing as proposed is not likely to be at variance to this Principle.

- Methodology References:
- BSD Consultants (2002)
 - URS consultants (2007)
 - Site Inspection (2008)

(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

There are 24 records of 4 fauna species of conservation significance within the local area (5km) radius. The closest records are *Isodon obesulus fusciventer* (Quenda) (P5), *Macropus irma* (Western Brushtail Wallaby) (P4) and *Calyptorhynchus latirostris* (Carnabys Black Cockatoo), located approximately 1.75 to 2 km South to South West of the applied area.

URS Consultants (2008) notes that *Falco Peregrinus* (Peregrine Falcon) has been historically recorded in the PITC site. However, this species was not observed by URS during their survey.

Given the size of the area under application is relatively small (0.3ha), does not dissect any currently connected bush land and is located within the 287ha site it is considered unlikely the vegetation applied to be cleared would be significant habitat for fauna indigenous to Western Australia. Therefore it is unlikely the proposal will be at variance with this Principle.

- Methodology References:
- URS Consultants (2007)
- GIS Database:
- SAC Bio datasets
 - Swan Coastal Plain North 1m

(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

There are two known records of Declared Rare Flora (DRF) in the local area (5km radius), *Caladenia huegelii* and *Pityrodia axillaris*. *Caladenia huegelii* is located approximately 2.6km North West and 3.9km East of the applied area. *C. huegelii* is a tuberous, perennial, herb that flowers during September and October.

P. axillaris is located approximately 2.6km North West of the applied area. *P. axillaris* is a diffuse shrub that flowers from July to December.

Both DRF occur on the same soils and within the same heddle vegetation complex as the applied area.

There are 6 records of 4 species of Priority flora within the local area (5km radius). The closest records are *Cyathochaeta teretifolia* (P3), *Jacksonia sericea* (P4) and *Hibbertia helianthenoides* (P3) located approximately 2.6km North West of the applied area. In addition there are two records of *Verticordia lindleyi* I (P4) approximately 4.1km South East of the applied area.

The flora survey within Lot 1, which includes the applied area, was conducted by BSD Consultants (2002) in Spring 2001. The flora survey did not identify any DRF or Priority species. Site Inspection (2008) also did not identify any DRF or Priority species within the applied area.

It is unlikely that the vegetation under application includes, or is necessary for the existence of a DRF or Priority species. Therefore, it is considered unlikely that the proposed clearing will be at variance to this Principle.

- Methodology References:
- BSD Consultants (2002)
 - URS Consultants report (2008)
 - Site Inspection (2008)
- GIS Database:
- Hedde Vegetation Complexes
 - Pre-European Vegetation
 - SAC Biodatasets
 - Soils, Statewide

(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 16 Known occurrences of Threatened Ecological Communities (TECs) within the local area (5km

radius). 5 of the 16 TECs exist within Lot 1, with the closest approximately 700m West North West of the applied sight and the buffer zone extending to 270m North West of the applied site. This TEC has been identified as Floristic community Type 20a, Banksia attenuate woodlands over species rich dense shrubland (Gibson et al. 1994).

The applied area is a combination of Banksia Woodland/Low Forest on the East and Open Woodland over heath or Heath on the West. Understoreys consist of low heath / open low heath with Xanthorrea sp., Jacksonia sp. and Verticordia sp. being the common understorey species in the Banksia Woodland/ Low Forest and fairly dense Regelia ciliata, Hypocalymma angustifolium, Daviesia physodes, Verticordia densiflora, Calytrix flavescens and Xanthorrea preissii in the Open Woodland. (Site Inspection, 2008)

The BSD Consultants report (2002) identified that the applied area comprises of Floristic Community Type (FCT) 21c, Low lying Banksia attenuata woodlands or shrubs (Open Forest (Melaleuca sp.) over open low heath (Xanthorrhoea sp.)). The FCT is considered to be well reserved and of low conservation risk (Gibson et al. 1994). Therefore, the applied area is not considered part of, or necessary for the maintenance of a TEC.

Given the information obtained from the Consultants report and the GIS Database (SAC Bio datasets), it is considered unlikely that the applied area is associated with the TEC 20a. Therefore the proposed clearing is considered unlikely to be at variance to this Principle.

Methodology	References:	
	-	BSD Consultants (2002)
	-	Gibson et al. (1994)
	-	Site Inspection (2008)
	GIS Database:	
	-	Hedde Vegetation Complexes
	-	Pre-European Vegetation
	-	SAC Biodatasets
	-	Soils, Statewide

(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 likely to be at variance to this Principle

The vegetation within the area under application is identified as a Hedde vegetation complex Bassendean complex, central and south, which has a current representation level of 27%.

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents the clearance of ecological communities with an extent below 30% of the present Pre-European settlement (Commonwealth of Australia 2001). The Hedde Bassendean complex in the area under application is below the recommended minimum of 30% representation.

Although the vegetation association is less than the recommended 30% minimum of Pre-European extent remaining, the applied area is considered to be to be within a constrained area. The EPA (2006) recognises the Perth Metropolitan Region as a constrained area, providing for the reduction of vegetation complexes to a minimum of 10% of Pre-European extent. The native vegetation association under assessment (Hedde) is greater than 10%.

Given the relatively small applied area (0.3ha) and the current vegetation representation levels it is considered that the vegetation under application is not likely to be at variance to this Principle. To mitigate potential impacts a condition to offset will be imposed if clearing is permitted.

	Pre-European (ha)		Current Extent (ha)		Remaining (%)
	In Secure tenure (%)				
IBRA Bioregions					
- Swan Coastal Plain*	15,011,456	571,758	38.1	4.7	
Vegetation Type:					
-Hedde:					
Bassendean	87,477	23,264	27	0.7	
complex					
Central & south**					
-Beard 1001*	57,412	15,241	26.5	4.8	
*(Shepherd 2006)					
** (EPA 2006)					

Methodology	References:	
	-	Commonwealth of Australia (2001)
	-	EPA (2006)

- Shepherd (2006)
- GIS Database:
- Heddle Vegetation Complexes
- Pre-European Vegetation

(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 applied area exists within 4 mapped wetlands (damplands) two of which are Conservation Category Wetlands (CCW) and 2 of which are Resource Enhancement Category Wetlands (REWC). All of the applied clearing area is located within the 50m wetland buffers (Water and Rivers Commission 2001). There are a total of 11 wetlands mapped in the local area (1km radius) and no water courses mapped in the local area (1km radius).

BSD Consultants report (2002) identified no wetland dependant vegetation within the surveyed area due to considerable drying over the past few decades. Site Inspection (2008) identified the presence of *Melaleuca preissiana*, a swamp species, known to be associated with wetlands.

Given the presence of *Melaleuca preissiana* within the applied area and taking into account the desiccated nature of the surrounding wetlands it is considered that this proposal is at variance with this Principle. It is noted however that the significance of this is greatly diminished due to the limited extent of the applied area (0.3ha).

Methodology References:

- Site Inspection (2008)
- Waters and Rivers Commission (2001)
- BSD Consultants report (2002)
- GIS Databases:
- Geomorphic Wetlands (Classification), Swan Coastal Plain
- Hydrography, linear ? DOE 01/02/2004

(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 Acid Sulphate Soil (ASS) risk mapping indicates the area under application is mapped as having a Class 1 risk. This classification is defined as having a high to moderate risk of shallow (<3m depth) ASS or potential ASS.

The landscape of the area under application can be described as occurring on subdued dune-swale terrain. (Northcote et al 1960). Soils within the applied area are part of the Bassendean Dune system and are described as well drained bleached grey sands. These soils have a high to very high risk of wind erosion, phosphorus export and acid sulphate soils (State of Western Australia 2005).

Given that the applied area under application is limited to 0.3ha, it is considered unlikely that the proposed clearing would cause salinity, wind erosion, phosphorus export or acid sulphate soils however it is considered possible that the clearing of the applied area could exacerbate existing conditions. Therefore the proposal may be at variance with this Principle. To mitigate the potential impact on the conservation area an offset will be imposed on a clearing permit if granted.

Methodology References:

- State of Western Australia (2005)
- Northcote et al. (1960)
- GIS Database:
- Acid Sulphate Soil Risk map, Swan Coastal Plain DEC
- Soils, Statewide ? DA 11/99
- Surface Geology

(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

The area under application is located within the Bush Forever Site 196. Bush Forever Site (Gnangara Road Bushland: total area 236ha) is part of a regionally significant bushland/wetland linkage system (Government of Western Australia 2000).

There are seven conservation reserves within the local area (5km radius) including the Gnangara-Moore River State Forest located 1.2km north, Bush forever site 198 located 1.2km South East, Bush Forever Site 193 located 1km North West (also identified as a System 6 Conservation Reserve), Site 304 located 3.4km East

(also identified as a System 6 Conservation Reserve), Bush Forever Site 493 located 3.2km South West, Bush Forever Site 463 located 2.9km North West (also identified as a System 6 Conservation Reserve) and Bush Forever Site 199 located 3.2km South West of the applied area.

Given the area under application is located within a conservation site (Bush Forever Site 196), the clearing as proposed is considered at variance to this Principle. To mitigate the potential impact on the conservation area an offset will be imposed on a clearing permit if granted.

Methodology	References:	
	-	Gouvernement of Western Australia (2000)
GIS Databases:	-	Bush Forever, MFP 07/01
	-	Metropolitan Regional Scheme (1963)
	-	System 6 Conservation Reserves, DEP 06/95
	-	

(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**
The applied area exists within 4 mapped wetlands (damplands) two of which are Conservation Category Wetlands (CCW) and 2 of which are Resource Enhancement Category Wetlands (REWC). All of the applied clearing area is located within the 50m wetland buffers (Water and Rivers Commission 2001). There are a total of 11 wetlands mapped in the local area (1km radius) and no water courses mapped in the local area (1km radius).

The area under application is located 840m west of Gngangara mound EPP Area and in a Public Drinking Water Source Area, being Gngangara Underground Water Pollution Control Area, which is a Priority 1 (P1) area. The P1 classification areas are defined to ensure that there is no degradation of the water source. P1 areas are declared over land where the provision of the highest quality public drinking water is the prime beneficial land use. The DOE (2004) policy states that existing approved land use/activities can continue at their presently approved level provided they operate lawfully (Department of Environment 2004). In addition, the applied area is considered to have low salinity risk.

Given the applied area is in a site with existing lawful land use activities, as well as the relatively small area of the applied area (0.3ha), the clearing as proposed is considered unlikely to be at variance to this Principle.

Methodology	References:	
	-	Department of Environment (2004)
GIS Databases:	-	Waters and Rivers Commission (2001)
	-	Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain DEC
	-	Hydrography, linear, DOE 01/02/2004
	-	Public Drinking Water Source Areas (PDWSA's), DOW
	-	Sailinity Risk LM 25m, DOLA 00
	-	

(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 applied area exists within 4 mapped wetlands (damplands) two of which are Conservation Category Wetlands (CCW) and 2 of which are Resource Enhancement Category Wetlands (REWC). All of the applied clearing area is located within the 50m wetland buffers (Water and Rivers Commission 2001). There are a total of 11 wetlands mapped in the local area (1km radius) and no water courses mapped in the local area (1km radius).

BSD Consultants report (2002) indicated that the applied area is considerably desiccated. Site inspection (2008) noted the dry nature of the soils however consideration must be taken for the time of year the Site Inspection was conducted (February 2008). Site Inspection (2008) also identified *Melaleuca preissiana*, a wetland dependant species, within the applied area.

Given the limited area (0.3ha) proposed to be cleared; it is considered that this proposal is not likely to be at variance to this Principle.

Methodology	References:	
	-	Waters and Rivers Commission (2001)
GIS Databases:	-	Site Visit (2008)
	-	Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain DEC
	-	Hydrography, linear, DOE 01/02/2004
	-	

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

Comments

Bush Forever (2008) advised that there is a Memorandum of Understanding (MOU) between Telstra and the Western Australian Planning Commission, and the applied area to be cleared is within an area identified in the MOU as a development area. As such, Bush Forever has no objections to the proposed clearing. However, recommends an offset package for lost vegetation is to be prepared with revegetation at a 2:1 ratio. If 0.8 ha is to be cleared then 1.6ha should be revegetated with locally endemic native species. The offset package is to be of net environmental gain and prepared and approved by the Department of Environment and Conservation prior to the removal of any vegetation.

Bush Forever (2008) also advised that the EPA have provided advice recommending that the offsets package should relate to a Conservation Category Wetland. In addition the EPA have advised that a 10 year Strategic development and conservation plan should be developed to ensure the protection of the vegetation and associated significant features.

The applied area is within the Proclaimed Groundwater Area of Perth. Therefore any abstraction of groundwater would require a licence. However, this application is not associated with groundwater extraction.

There are no Aboriginal Sites of Significance listed within the area under application.

Lot 1 on Diagram 34033 is freehold land owned by Telstra Corporation for the land use of radio transmitter. Lot 1 is zoned Public Purpose (Special Uses) under the Metropolitan Regional Scheme.

Methodology

References:

- Bush Forever (2008)
- GIS Databases:
 - Aboriginal Sites of Significance, DIA 28/02/03
 - Metropolitan Regional Scheme, DPI 07/10/05
 - RIWI Act, Groundwater Areas, DOW
 - RIWI Act, Surface Water Areas, DOW

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	0.3	The assessable criteria have been addressed and the clearing as proposed is at variance to Principle (f and h), may be at variance to Principle (g) and is unlikely to be at variance to Principle (a,b,c,d,e,i and j)

5. References

- BSD Consultants (2002) Telstra PITC, Landsdale Environmental Management Plan, prepared for Telstra; BSD Consulting Pty Ltd, Western Australia. TRIM Ref 43893
- Bush Forever (2008) Direct Interest Submission. Strategic Biodiversity Planning - Department of Planning and Infrastructure. TRIM Ref DOC46118
- Commonwealth of Australia (2001). National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra
- Department of Environment (2004) Water Quality Protection Note - Land use Compatibility in Public Drinking Water Source Areas. Department of Environment, Western Australia
- EPA (2006) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.
- Gibson N., Keighery B., Keighery G., Burbidge A. and Lyons M. (1994). A Floristic Survey of the Southern Swan Coastal Plain. Western Australian Department of Conservation and Land Management and the Western Australian Conservation Council.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Site Inspection (2008) Site Inspection Report, Department of Environment and Conservation (DEC), Western Australia, TRIM Ref DOC46020
- State of Western Australia (2005) Agmaps Land Manager CD Rom
- URS Consultants (2007) Clearing Permit Application and Support Documentation - Telstra PITC Fire Hazard Clearing, prepared for Telstra; URS Australia Pty Ltd, Western Australia. TRIM Ref DOC38494
- Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth

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)

