



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5886/1
Permit Holder:	Swan River Trust
Duration of Permit:	From 8 February 2014 to 8 February 2019

ADVICE NOTE:

This Permit does not confer upon the Permit Holder authorisation to access the land to which the Permit relates.

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of constructing wetland basins, underground pumping system, electrical supply, pipeline, access tracks, riffle and riverbank and bed remediation.

2. Land on which clearing is to be done

Lot 81 on Deposited Plan 29644 (Aveley 6069)
Lot 44 on Plan 10342 (Belhus 6069)

3. Area of Clearing

The Permit Holder must not clear more than 0.12 hectares of native vegetation within the area hatched yellow on attached Plan 5886/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II – MANAGEMENT CONDITIONS

5. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

DEFINITIONS

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Jane Clarkson
ACTING MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

9 January 2014



1. Application details

1.1. Permit application details

Permit application No.: 5886/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Swan River Trust

1.3. Property details

Property: LOT 81 ON PLAN 29644 (Lot No. 81 MILLHOUSE AVELEY 6069)
LOT 44 ON PLAN 10342 (BELHUS 6069)
Local Government Area: City of Swan
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.2		Mechanical Removal	Restoration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 9 January 2013

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
Mapped Beard vegetation association 1009 is described as medium woodland; marri & river gum (Shepherd et al 2001).	The clearing of 0.12 hectares of native vegetation within Lot 81 on Deposited Plan 29644, Aveley and Lot 44 on Plan 10342, Belhus is for the purposes of constructing wetland basins, underground pumping system, electrical supply, pipeline, access tracks, riverbank and bed remediation and riffle.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation description and condition was determined from a flora and vegetation assessment undertaken by the Swan River Trust (2010).
Hedde vegetation complex 'Swan' is described as: fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca raphiophylla (Swamp Paperbark) with localised occurrence of low open forest of Casuarina obesa (Swamp Sheoak) and Melaleuca cuticularis (Saltwater Paperbark) (Hedde et al 1980).			The vegetation community present within the area under application is Eucalyptus rudis - Melaleuca raphiophylla medium height riparian woodland with elements of Corymbia calophylla woodland over perennial rushes and sedges.
Mattiske vegetation complex 'Guildford' is described as: mosaic of open forest of Corymbia calophylla-Eucalyptus wandoo-Eucalyptus marginata subsp. marginata and woodland of Eucalyptus wandoo (with rare occurrences (Mattiske and Havel 1998).			The application area is in a degraded (Keighery 1994) condition with historic clearing, altered fire regimes and weed invasion being the main disturbance factors (Swan River Trust 2010).

3. Assessment of application against clearing principles

Comments

The application is for the proposed clearing of 0.12 hectares of native vegetation (within a larger footprint of 2.2 hectares) within Lot 81 on Deposited Plan 29644, Aveley and Lot 44 on Plan 10342, Belhus, for the purpose of constructing wetland basins, underground pumping system, electrical supply, pipeline, access tracks, riffle, riverbank and bed remediation. The project being undertaken to create a series of wetland basins to reduce the nutrient content in Ellen Brook before it flows to Swan River.

The application area is in a degraded (Keighery 1994) condition with historic clearing, altered fire regimes and weed invasion being the main disturbance factors (Swan River Trust 2010).

A number of rare and priority flora have been recorded within the local area (five kilometre radius). A spring flora and vegetation survey was undertaken within the area under application and no rare or priority flora species were identified (Swan River Trust 2010). Given the degraded (Keighery 1994) condition of the area under application the vegetation proposed to be cleared is not likely to contain high biological diversity.

Numerous fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the local area (five kilometre radius) including: *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Dasyurus geoffroii* (Chuditch), *Macrotis lagotis* (Bilby) and *Pseudemydura umbrina* (Western Swamp Turtle) (DEC 2007-). Given the small area proposed to be cleared (0.12 hectares) within a larger footprint (2.2 hectares) and the degraded (Keighery 1994) condition of the vegetation under application, the clearing as proposed is not likely to have an impact on significant habitat for fauna species indigenous to Western Australia.

The application area is located within Bush Forever site 300. Given the small (0.12 hectares) degraded (Keighery 1994) area proposed to be cleared within a larger footprint (2.2 hectares) and that the project will improve the values of Ellen Brook, the clearing proposed is not likely to have a significant impact on the environmental values of this conservation area. The proposed clearing may indirectly impact Bush Forever site 300 through the spread of weeds and dieback. Weed and dieback management practices will help mitigate this risk.

Ellen Brook intersects the application area. In addition the application area is mapped within a Resource Enhancement Wetland. The vegetation proposed to be cleared is growing in association within a watercourse and wetland. However given the small area proposed to be cleared (0.12 hectares) and that the purpose of clearing will improve the environmental values of Ellen Brook, the impact of the proposed clearing on Ellen Brook is considered to be minimal.

The proposed clearing may increase sedimentation into Ellen Brook, however given the small area under application (0.12 hectares) that the purpose of clearing will improve the environmental values of Ellen Brook, the impact on the watercourse is expected to be short term and minimal and therefore the clearing proposed is not likely to have a significant impact on the quality of surface water.

There is approximately 25 per cent native vegetation remaining in the local area (five kilometre radius). The area under application is located with the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and is mapped as Beard Association 1009, Heddle vegetation Complex 'Swan' and Mattiske vegetation complex 'Guildford' which have 43, 16, 15 and 7 per cent of their pre European vegetation extent remaining respectively (Government of Western Australia 2013, Heddle et al 1980 and Mattiske and Havel 1998). The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). Therefore the application area is considered to be located within an extensively cleared area. However, given the small area under application (0.12 hectares) in a degraded (Keighery 1994) condition it is unlikely the vegetation proposed to be cleared is considered to be a significant remnant.

No threatened ecological communities have been recorded within close proximity of the area under application. Given the small size (0.12 hectares) of the area proposed to be cleared, the clearing as proposed is unlikely to cause or exacerbate land degradation or flooding or impact on ground water.

The assessment of the proposed clearing identified that the clearing is at variance to principle (f), may be at variance to principle (h) and is not likely to be at variance to the remaining clearing principles.

Methodology

References:

- Commonwealth of Australia (2001)
- DEC (2007-)
- Government of Western Australia (2013)
- Heddle (1980)
- Keighery (1994)
- Mattiske and Havel (1998)
- Swan River Trust (2010)

GIS Databases:

- Bush Forever
- DEC, Tenure
- Geomorphic Wetlands, Swan Coastal Plain
- Hydrology, linear
- Pre-European vegetation
- SAC Bio datasets (Accessed December 2013)
- Soils, statewide

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

Comments

The proposed clearing is part of the Ellen Brook End-of-Catchment Wetland Project. The project proposes to revegetate the application area with over 80,000 native seedlings to offset the proposed clearing.

The Western Australian Planning Commission (WAPC 2013) has issued Approval to Commence Development for the creation of a nutrient wetland in the flood plain of Ellen Brook within Lot 81 on Plan 29644.

The application area is located within Swan Groundwater and Swan River System Surface Water areas proclaimed under the Rights in Water and Irrigation Act 1914. The Department of Water (2013) has issued the Swan River Trust a permit to interfere with beds and banks of a watercourse within Lot 81.

The Office of the Environmental Protection Authority has assessed the project and has set the level of assessment as 'Not assessed - no advice given'.

The application area is located within the Aboriginal Site of Significance 'Waterways and Wetlands between Bullsbrook and Moore River'. The Department of Indigenous Affairs has granted consent under Regulation 7 and 10 (a) - (e [i]) of the Aboriginal Heritage Regulations 1974 to the Swan River Trust to construct a nutrient stripping wetland in Ellen Brook.

Methodology

References:

- Department of Water (2013)
- WAPC (2013)

GIS Databases:

- Aboriginal Site of Significance

4. References

- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed December 2013
- Department of Water (2013) Permit to Obstruct or interfere (S17). Western Australia. DER Ref:A712556
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Swan River Trust (2010) Flora and Vegetation Survey, Lots 81 and 10865, Belhus. Western Australia. DER Ref: A695223.
- WAPC (2013) Approval to Commence Development -Lot 81 on Plan 29644. Western Australian Planning Commission. Western Australia. DER Ref: A695223