



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 7862/1

Duration of Permit: From 13 October 2018 to 13 October 2020

PERMIT HOLDER

Abdula Abduramanoski

Kym Abduramanoski

LAND ON WHICH CLEARING IS TO BE DONE

Lot 1577 on Deposited Plan 101656, Gngangara

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.325 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7862/1.

CONDITIONS

1. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

2. 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*:

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

RECORD KEEPING AND REPORTING

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares).; and
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit.
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this Permit.

4. Reporting

The Permit Holder must provide to the CEO the records required under condition 3 of this Permit, when requested by the CEO.

DEFINITIONS

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

CEO: means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

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 Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



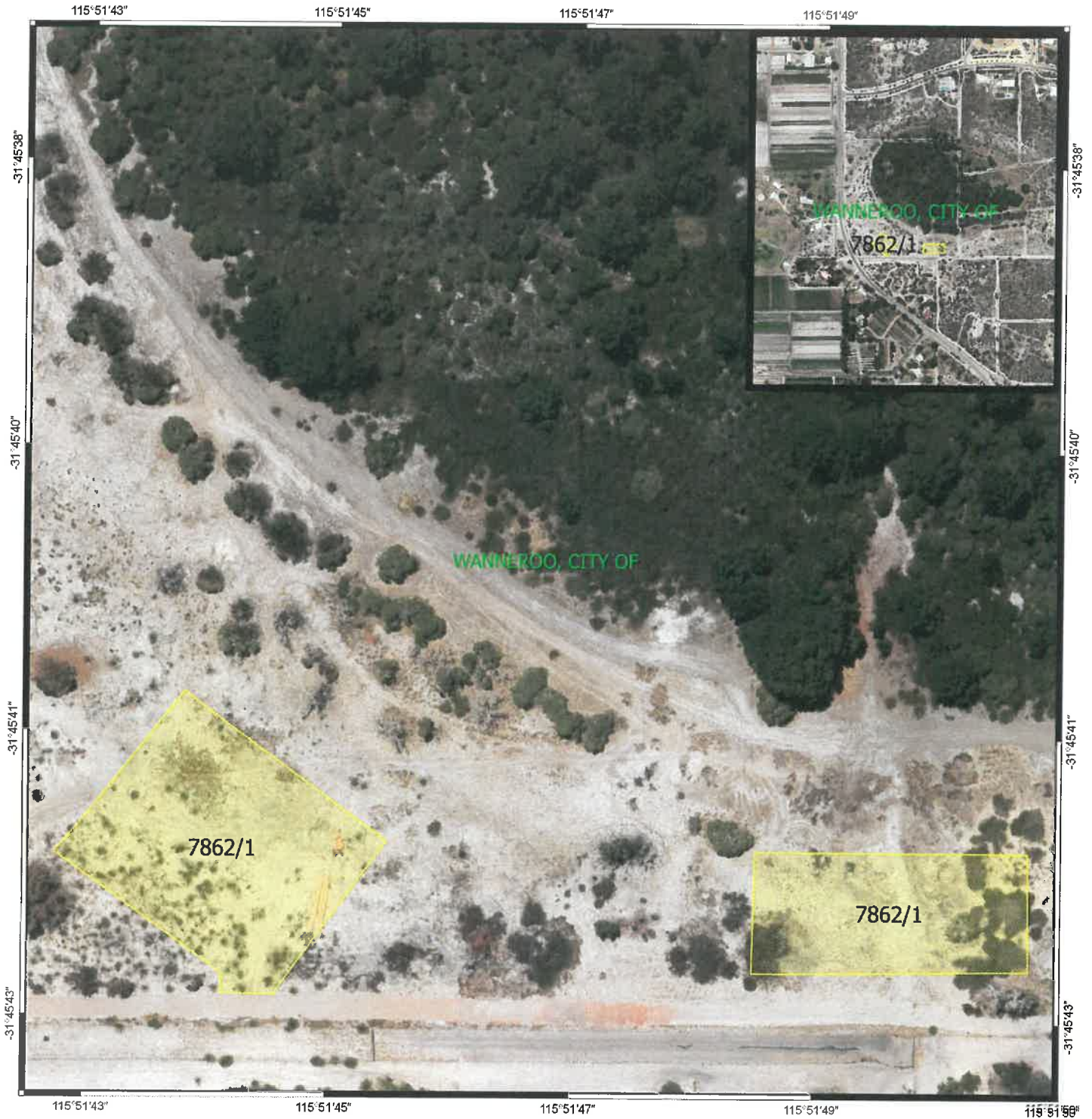
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Abbie Crawford
MANAGER
NATIVE VEGETATION REGULATION



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

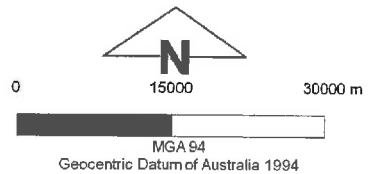
13 September 2018


Plan 7862/1



Legend

-  Areas approved to clear
 -  Local Government Authority
- Imagery



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Officer with delegated authority under Section 20
of the Environmental Protection Act 1986





1. Application details

1.1. Permit application details

Permit application No.: CPS 7862/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mr & Mrs Kym & Abdula Abduramanoski

1.3. Property details

Property details: Lot 1577 on Deposited Plan 101656, Gnangara
Property:
Local Government Authority: City of Wanneroo
DBCA Region:
DBCA District: Swan
Localities: Gnangara

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.325 (as revised)		Mechanical Removal	Construction of a house and shed

1.5. Decision on application

Decision on Permit Application: Granted

Decision Date: 13 September 2018

Reasons for Decision: The clearing permit application was received by the Department of Water and Environmental Regulation (DWER) on 10 November 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to principle (f) and not likely to be at variance to any of the remaining clearing principles.

The Delegated Officer noted the extent of the proposed clearing, the condition of the vegetation within the application area, and that sufficient vegetation would remain within the adjacent land so as not to significantly impact upon the environmental values of the adjacent wetland.

The Delegated Officer determined that the proposed clearing may increase the spread of weeds and dieback into adjacent vegetation. To minimise this impact, a condition has been placed on the permit requiring the implementation of weed and dieback management measures.

2. Site Information

Clearing Description: The revised application is to clear up to 0.325 hectares of native vegetation within Lot 1577 Deposited Plan 101656 (Lot 1577), Gnangara, for the purpose of constructing a house and shed (refer to Figure 1).

The establishment of a 20 metre building protection zone around the dwelling once constructed does not require a clearing permit.

Vegetation Description: The application area is mapped as Swan Coastal Plain vegetation complex:

- Bassendean Complex – Central and South: Vegetation ranges from woodland of *Eucalyptus marginata* (Jarrah) - *Allocasuarina fraseriana* (Sheoak) - *Banksia* species to low woodland of *Melaleuca* species, and sedgeland on the moister sites. This area includes the transition of Jarrah to *Eucalyptus tottiana* (Pricklybark) in the vicinity of Perth (Hedde et al., 1980).

Officers of the Department of Water and Environmental Regulation (DWER) conducted a site inspection of the application area on 18 January 2018. Based on the findings of the site inspection, the vegetation within the application area has evidence of historical disturbance, and comprises of occasional *Banksia* sp. and *Melaleuca* sp. over *Macrozamia* sp. (*Zamia*) and *Xanthorrhoea preissii* (Grass Tree), over *Alexgeorgea nitens*, *Carpobrotus edulis* (Pigface; introduced) and mixed introduced grasses (DWER, 2018).

Vegetation Condition: The condition of the vegetation was determined via aerial imagery, and from the site inspection (DWER, 2018):

- Completely Degraded: the structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery, 1994).

Soil/Landform Type:

The application area is mapped within the following soil and landform map units:

- 211Sp Spearwood System; Sand dunes and plains; yellow deep sands, pale deep sands and yellow/brown shallow sands (Northcote et al., 1960-68).

Comment:

The local area considered in the assessment of this application is a 10 kilometre radius from the perimeter of the application area. The local area retains approximately 25 per cent native vegetation cover.

Figures and Maps



Figure 1: Map of revised application area showing surrounding land use and adjacent wetland



Figure 2: completely degraded condition of the vegetation within the application area



Figure 3: some of the shrubs and trees within the application area



Figure 4: dead and burnt trees within the application area



Figure 5: completely degraded condition of the vegetation within the application area

3. Background, avoidance and minimisation

The applicant originally applied to clear up to 1.05 hectares of native vegetation within Lot 1577 for the purpose of building a house, shed, access track, and wedding venues (refer to Figure 6).

The original application was advertised on DWER's website on 5 January 2018 for a 21 day public submission period, and no submissions were received during this period.

The original application was wholly located within Bush Forever Site 326 'Hawkins Road, Bushland, Jandabup/Gnangara', and was partly located within a 'conservation category' wetland (CCW) which contains vegetation in the following condition:

- Excellent: vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species; to
- Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

The Department of Biodiversity, Conservation and Attractions (DBCA) advised that the original application will result in narrow bands of fragmented vegetation within the CCW, and that there is a substantial risk of introduced plant species encroaching into the CCW, leading to deterioration of vegetation condition and fauna habitats (DBCA, 2018). DBCA recommended the retention of a minimum 50 metre buffer to the CCW, consistent with Environmental Protection Authority guidance (DBCA, 2018).

The Department of Planning, Lands and Heritage (DPLH) advised that the original application is inconsistent with State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region, and will directly impact on the environmental values of Bush Forever Site 326 (DPLH, 2018a).

Both DBCA and DPLH considered that the original application may have indirect impacts to the CCW and Bush Forever Site 326 through changes to the hydrological regime, vegetation trampling, increase of nutrients, contamination, fire management issues, rubbish dumping, drainage access issues, weed invasion, an increased risk of erosion and sedimentation, and an increased risk of introduction or spread of weeds and dieback (DBCA, 2018; DPLH, 2018a).

The City of Wanneroo advised that the original application is premature, requires development approval to proceed, and is not supported at this time (City of Wanneroo, 2018).

On 13 March 2018, a DWER Delegated Officer wrote to the applicant, outlining environmental impacts identified during the assessment of the application. The Delegated Officer also noted that development approval had not been obtained from the City of Wanneroo for the proposed development. The Delegated Officer invited the applicant to provide further information in relation to these matters.

In response to the Delegated Officer's letter, the applicant requested that the application be revised to remove the portions of the original application area that were located within the CCW (refer to Figure 7). This first revision of the application reduced the proposed clearing to 0.3 hectares of native vegetation and largely avoided impacts to vegetation in 'Excellent' to 'Very Good' condition, to the CCW and to the Bush Forever Site 326. This first revision of application was advertised on DWER's website on 22 May 2018 for a seven day public submission period, and no submissions were received during this period.

DPLH noted that this first revision of the application area still impacts Bush Forever Site 326, and advised that DPLH supports the construction of a house and shed but not the additional access tracks nor the sealing of these and the perimeter firebreaks (DPLH, 2018b). DPLH advised that the sealing of internal access tracks and perimeter firebreaks could cause contamination and risk damage to the CCW through unmanaged drainage and increased access (DPLH, 2018b).

Further to discussions between the City of Wanneroo and the applicant, the application was further revised to be consistent with a Development Application approved by the City of Wanneroo on 13 August 2018 (reference DA2018/142) for a single house and an outbuilding, specifically 0.2 hectares for a house and 0.125 hectares for a shed (refer to Figure 1). The following assessment is based on this second revision of the application area.



Figure 6: Original application area as advertised on 5 January 2018



Figure 7: First revision of the application area as advertised on 22 May 2018

4. Assessment of application against clearing principles

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

Proposed clearing is not likely to be at variance to this Principle

As outlined in Section 2, the vegetation within the application area is in a 'Completely Degraded' (Keighery, 1994) condition, and comprises of occasional *Banksia* sp. and *Melaleuca* sp. over *Zamia* and Grass Tree, over *Alexgeorgea nitens*, Pigface and introduced grasses (DWER, 2018).

As discussed under Principle (b), according to available databases, eight threatened fauna species listed as specially protected under the *Wildlife Conservation Act 1950*, and 12 priority fauna species, have been recorded within the local area. Noting the condition of the vegetation within the application area, the application area is not likely to comprise significant habitat for indigenous fauna, including species of conservation significance.

According to available databases, one rare flora species and 10 priority flora species have been recorded within the local area. Noting the condition of the vegetation within the application area, and the habitat preferences of these species, the application area is not likely to include, or be necessary for the continued existence of, rare or priority flora. Rare flora is discussed further under Principle (c).

According to available databases, three threatened ecological communities (TEC) and two priority ecological communities (PEC) have been recorded within the local area. Approximately half of the western portion of the application area is within a mapped occurrence of the ecological community 'Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region', listed as a 'Priority 3(iii)' PEC by DBCA, and as an 'Endangered' TEC under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. As discussed under Principle (d), noting the condition and species composition of the vegetation within the application area, the application area is not likely to represent this PEC/TEC.

Noting the above, the application area is unlikely to comprise a high level of biological diversity. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

As outlined in Section 2, the vegetation within the application area is in a 'Completely Degraded' (Keighery, 1994) condition, and comprises of occasional *Banksia* sp. and *Melaleuca* sp. over *Zamia* and Grass Tree, over *Alexgeorgea nitens*, Pigface and introduced grasses (DWER, 2018). As discussed under Principle (f), the application area is within close proximity to a CCW. During the site inspection, the applicant advised that kangaroos, white-tailed and red-tailed black cockatoos and the Splendid Fairy Wren occur within the CCW (DWER, 2018).

According to available databases, eight threatened fauna species and 12 priority fauna species have been recorded within the local area. Noting the current known range extents of these species, the application area may comprise habitat for the following:

- Carnaby's Cockatoo (*Calyptorhynchus latirostris*), listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* (WC Act). According to available databases, the application area is within the mapped roosting extent of this species.
- Baudin's Cockatoo (*Calyptorhynchus baudinii*), listed as rare or likely to become extinct under the WC Act.
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus baudinii*), listed as rare or likely to become extinct under the WC Act.
- Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), listed as rare or likely to become extinct under the WC Act.
- Quenda / Southern Brown Bandicoot (*Isodon obesulus* subsp. *fusciventer*), listed as Priority 4 by DBCA.
- Western Brush Wallaby (*Notamacropus irma*), listed as Priority 4 by DBCA.

Noting the habitat preferences of these species, and the condition and species composition of the vegetation within the application area, these species may utilise the application area when moving through the landscape, however noting the condition and species composition of the vegetation within the application area, and the extent of the proposed clearing, the application area is unlikely to comprise significant habitat for these species.

Noting the condition of the vegetation within the application area, and the presence of habitats in an adjacent wetland and in nearby conservation areas, the application area is not likely to comprise significant habitat for indigenous fauna, including species of conservation significance. The proposed clearing is not likely to be at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

According to available databases, one rare flora species has been recorded within the local area:

- *Caladenia huegelii* (Grand Spider Orchid; threatened/critically endangered) is known from 41 recorded occurrences from between Wanneroo and Busselton from grey or brown sand, clay loam associated with areas of dense undergrowth (Western Australian Herbarium, 1998-). This species is typically found in areas of mixed woodland of *Eucalyptus marginata* (Jarrah), *Banksia attenuata* (Candlestick Banksia), *Banksia ilicifolia* (Holly-leaved Banksia) and *Banksia menziesii* (Firewood Banksia), with scattered Sheoak and *Corymbia calophylla* (Marri) over dense shrubs of *Stirlingia latifolia* (Blueboy), *Hypocalymma robustum* (Swan River Myrtle), *Hibbertia hypericoides* (Yellow Buttercups), *Hibbertia subvaginata*, Grass Tree, *Adenanthos cuneatus* (Coastal Jugflower) and *Conostylis* species (DEC, 2009). Throughout its range, this species favours areas of dense undergrowth on deep grey-white sand usually associated with the Bassendean sand-dune system (DEC, 2009).

Noting the condition of the vegetation within the application area, and the habitat preferences of this species, the application area is not likely to include, or be necessary for the continued existence of, rare flora. Given the above, the proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, two TECs have been recorded within the local area. As discussed under Principle (a), approximately half of the western portion of the application area is within a mapped occurrence of the Commonwealth-listed TEC 'Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region'.

The Approved Conservation Advice for this TEC specifies a number of criteria for vegetation to be considered representative of this TEC (TSSC, 2016). These criteria include location on sandplain landforms, a structure of low woodland or forest, the presence of a dominant *Banksia* component which includes at least one of Candlestick Banksia, Firewood Banksia, *Banksia prionotes* (Acom Banksia) and/or Holly-leaved Banksia, with/without the presence of emergent medium-height trees comprised of species including *Eucalyptus* spp. or *Allocasuarina* spp., with a species-rich sclerophyllous understorey and herbaceous ground layer (TSSC, 2016). These criteria also specify minimum patch sizes and condition ratings, which include minimum patch size of two hectares for vegetation in 'Good' (Keighery, 1994) condition and a minimum patch size of one hectare for vegetation in 'Very Good' (Keighery, 1994) condition (TSSC, 2016).

As outlined in Section 2, the vegetation within the application area is in a 'Completely Degraded' (Keighery, 1994) condition, and comprises of occasional *Banksia* sp. and *Melaleuca* sp. over *Zamia* and Grass Tree, over *Alexgeorgea nitens*, Pigface and introduced grasses (DWER, 2018). Noting this and the size of the application area, the vegetation within the application area does not meet the criteria for vegetation to be considered representative of this TEC.

Noting the above, the application area is not likely to comprise, or be necessary for the maintenance of, a TEC. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The Environmental Protection Authority (EPA) recognises that Perth Metropolitan Region to be a constrained area (EPA, 2008). The application area is located within the mapped extent of the Perth Metropolitan Region Scheme.

As indicated in Table 1, the current extents of native vegetation within the IBRA bioregion and the mapped vegetation complex are above the 10 per cent threshold for a constrained area (Government of Western Australia, 2018a; Government of Western Australia, 2018b). As outlined in Section 2, the local area retains approximately 25 per cent native vegetation cover. Noting this, the condition of the vegetation within the application area, and extent of vegetation cover within the local area (including nearby conservation areas), the application area is not likely to be a significant remnant in an extensively cleared area.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Table 1: Vegetation extents

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent DBCA Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,222	578,997	38.57	38.47
Swan Coastal Plain Complex **				
Bassendean Complex Central and South	87,476.25	23,533.09	26.90	4.99

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

Proposed clearing is at variance to this Principle

According to available databases, the application area is approximately 50 metres from a CCW identified in the *Geomorphic Wetlands Swan Coastal Plain* dataset as a dampland (seasonally waterlogged basin; wetland UFI 8102) (refer to Figure 1). This CCW is approximately 9.9 hectares in total area, and is located within the Gngangara consanguineous suite (natural wetland group), of which 28.9 per cent retain values consistent with 'conservation' category. In consideration of the substantial loss of damplands within the Gngangara suite, wetland UFI 8102 is likely to support important representative values (DBCA, 2018).

As outlined in Section 3, DBCA advised that there is a risk of introduced plant species encroaching into the CCW, and recommended the retention of a minimum 50 metre buffer to the CCW (DBCA, 2018). The eastern portion of the application area overlaps this buffer (refer to Figure 1), however noting the condition of the vegetation within the application area, the proposed clearing is unlikely to impact on the environmental values of the CCW. Notwithstanding, implementing weed and dieback management measures will assist in managing the risk of introduction or spread of weeds and dieback to the CCW.

As outlined in Section 2, the vegetation within the application area includes *Melaleuca* sp. (DWER, 2018). Noting this, the proposed clearing will impact on vegetation growing in association with a watercourse or wetland. The proposed clearing is at variance to this Principle. Although the application area contains vegetation growing in association with a wetland, the proposed clearing is not likely to result in any significant residual environmental impacts.

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

Proposed clearing is not likely to be at variance to this Principle

As outlined in Section 2, the soil type within the application area is mapped as sands (Northcote et al., 1960-68). The average annual rainfall for the local area is approximately 800 millimetres.

As indicated in Table 2, greater than 70 per cent of the mapped soil unit within the application area has a high to extreme risk of water erosion and phosphorus export, and 30 to 50 per cent of the mapped soil unit within the application area have a high to extreme risk of salinity.

Noting the above, the proposed clearing may contribute to wind erosion, phosphorus export and salinity, however noting the extent of the proposed clearing and the condition of the vegetation within the application area, these land degradation impacts are not likely to be appreciable. The proposed clearing is not likely to be at variance to this Principle.

Table 2: Land Degradation Hazards (Schoknecht et al., 2004)

Risk categories	Application area
Wind erosion	>70% of map unit has a high to extreme wind erosion risk
Water erosion	3-10% of map unit has a high to extreme water erosion risk
Salinity	30-50% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	<3% of map unit has a high subsurface acidification risk or is presently acid
Flood risk	<3% of the map unit has a moderate to high flood risk
Water logging	<3% of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	>70% of map unit has a high to extreme phosphorus export risk

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, the application area is within Bush Forever Site 326 'Hawkins Road, Bushland, Jandabup/Gngangara', and is approximately 750 metres west of the Gngangara-Moore River State Forest. The nearest privately-managed conservation area is approximately 1.7 kilometres from the application area.

As outlined in Section 2, the vegetation within the application area is in a 'Completely Degraded' (Keighery, 1994) condition (DWER, 2018). Noting this, and the size of the application area, the proposed clearing is not likely to impact on the environmental values of Bush Forever Site 326.

Noting the separation distances between the application area, Gngangara-Moore River State Forest and the nearest privately-managed conservation area, the proposed clearing is not likely to impact on the environmental values of these nearby conservation areas.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely at variance to this Principle

As discussed under Principle (f), the application area is located within close proximity to a CCW. The proposed clearing may result in a short-term increase in run-off and sedimentation within this CCW.

Noting the extent of the proposed clearing, the condition of the vegetation within the application area, and the extent and proximity of remnant vegetation within the local area, the proposed clearing is not likely to cause appreciable deterioration in the quality of surface or underground water. The proposed clearing is not likely at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

As outlined in Section 2, the soils within the application area comprise sands. As discussed under Principle (f), the application area is located within close proximity to a CCW.

Noting the extent of the proposed clearing, the mapped soil type within the application area, and the extent and proximity of remnant vegetation in the local area, the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding. The proposed clearing is not likely to be at variance to this Principle.

Planning instruments and other relevant matters.

The revised application is to clear up to 0.325 hectares of native vegetation within Lot 1577 for the purpose of constructing a house and shed (refer to Figure 1).

The revised application was advertised on DWER's website on 15 June 2018 for a seven day public submission period, and no submissions were received during this period.

The City of Wanneroo advised that Lot 1577 is zoned 'General Rural' under its District Planning Scheme No. 2, and that a development application is required to be submitted and approved prior to undertaking the proposed development (City of Wanneroo, 2018). The City of Wanneroo granted Development Approval for a single house and an outbuilding (reference DA2018/142) on 13 August 2018.

The application area is located within the Wanneroo Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act). The taking of groundwater within this area is subject to assessment and licencing under the RiWI Act.

No registered Aboriginal Sites of Significance occur within the application area.

As outlined in Section 3 and discussed under Principle (h), the application area is within Bush Forever Site 326. In accordance with sections 5.1.1 (ii) and 5.1.2 (i)(e) of the Western Australian Planning Commission's State Planning Policy No. 2.8 *Bushland Policy for the Perth Metropolitan Region*, mitigation and offsets for the loss of regionally significant bushland is recommended. The Delegated Officer had regard for the extent of the proposed clearing and the condition of the vegetation within this portion of the application area, and determined that the proposed clearing is not likely to have a significant environmental impact on Bush Forever Site 326 and that an offset is not required in this instance.

5. References

- City of Wanneroo (2018) Planning advice provided in relation to clearing permit application CPS 7862/1 (original and revised applications), received 20 June 2018 (DWER ref. A1694148).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2018) Wetlands advice provided in relation to clearing permit application CPS 7862/1 (original application), received 9 February 2018 (DWER ref. A1614373).
- Department of Environment and Conservation (DEC) (2009) Grand Spider Orchid (*Caladenia huegelii*) Recovery Plan. Commonwealth Department of the Environment, Water, Heritage and the Arts, Canberra.
- Department of Planning, Lands and Heritage (DPLH) (2018a) Bush Forever advice provided in relation to clearing permit application CPS 7862/1 (original application), received 28 February 2018 (DWER ref. A1632556).
- Department of Planning, Lands and Heritage (DPLH) (2018b) Bush Forever advice provided in relation to clearing permit application CPS 7862/1 (first revision of application), received 31 May 2018 (DWER ref. A1685509).
- Department of Water and Environmental Regulation (DWER) (2018) Site Inspection Report (DWER ref. A1697121).
- Environmental Protection Authority (EPA) (2008) Environmental Guidance for Planning and Development. Guidance Statement No. 33. Environmental Protection Authority. Western Australia.
- Government of Western Australia. (2018a) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. Available from: <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>.
- Government of Western Australia. (2018b) 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Biodiversity, Conservation and Attractions, Perth. Available from: <https://catalogue.data.wa.gov.au/dataset/dbca>.
- 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.

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GIS Databases:

- Aboriginal Sites of Significance
- DBCA Managed Estate
- Directory of Important Wetlands
- Groundwater salinity
- Geomorphic wetlands (classification) Swan Coastal Plain
- Hydrography, hierarchy
- Hydrography, linear
- Land Degradation datasets
- Mean annual rainfall
- NLWRA, Current Extent of Native Vegetation
- Position Statement for Wetlands
- SAC Bio Datasets (Accessed May 2018)
- Soils, Statewide
- Topographic contours
- Vegetation Complexes SCP