



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: 6623/1  
File Number: DER2015/001432-1  
Duration of Permit: From 17 September 2016 to 17 September 2023

### PERMIT HOLDER

Mr Stuart Francis Saggars

### LAND ON WHICH CLEARING IS TO BE DONE

Lots 72 and 81 on Deposited Plan 232927, Stirling Estate

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 1.507 hectares of native vegetation within the combined areas cross-hatched yellow on attached Plan 6623/1.

### CONDITIONS

#### 1. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 17 September 2018.

#### 2. 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the clearing area to be cleared;
- (b) ensure that no *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.

#### 3. Revegetation and rehabilitation

The Permit Holder must implement and adhere to the document 'Planting Guide Revised' provided to the Department of Environment Regulation on 17 February 2016.

#### 4. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

In relation to the *revegetation and rehabilitation* of areas pursuant to condition 3 of this Permit:

- (i) the location of any areas *revegetated and rehabilitated*, 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;
- (ii) a description of the *revegetation and rehabilitation* activities undertaken;
- (iii) the size of the area *revegetated and rehabilitated* (in hectares); and
- (iv) the species composition, structure and density of *revegetation and rehabilitation*.

## 5. Reporting

- (a) The Permit Holder must provide to the *CEO* on or before 31 January of each year, a written report:
- (i) of records required under condition 4 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January and 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out must be provided to the *CEO* on or before 31 January of each year.
- (c) Prior to 17 June 2023, the Permit Holder must provide to the *CEO* a written report of records required under condition 4 of this Permit where these records have not already been provided under condition 5(a) of this Permit.

## DEFINITIONS

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

*CEO* means the Chief Executive Officer; and

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

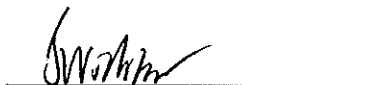
*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*rehabilitate/ed/ion* means actively managing an area containing native vegetation in order to improve the ecological function of that area.

*revegetate/ed/ion* means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

*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 Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

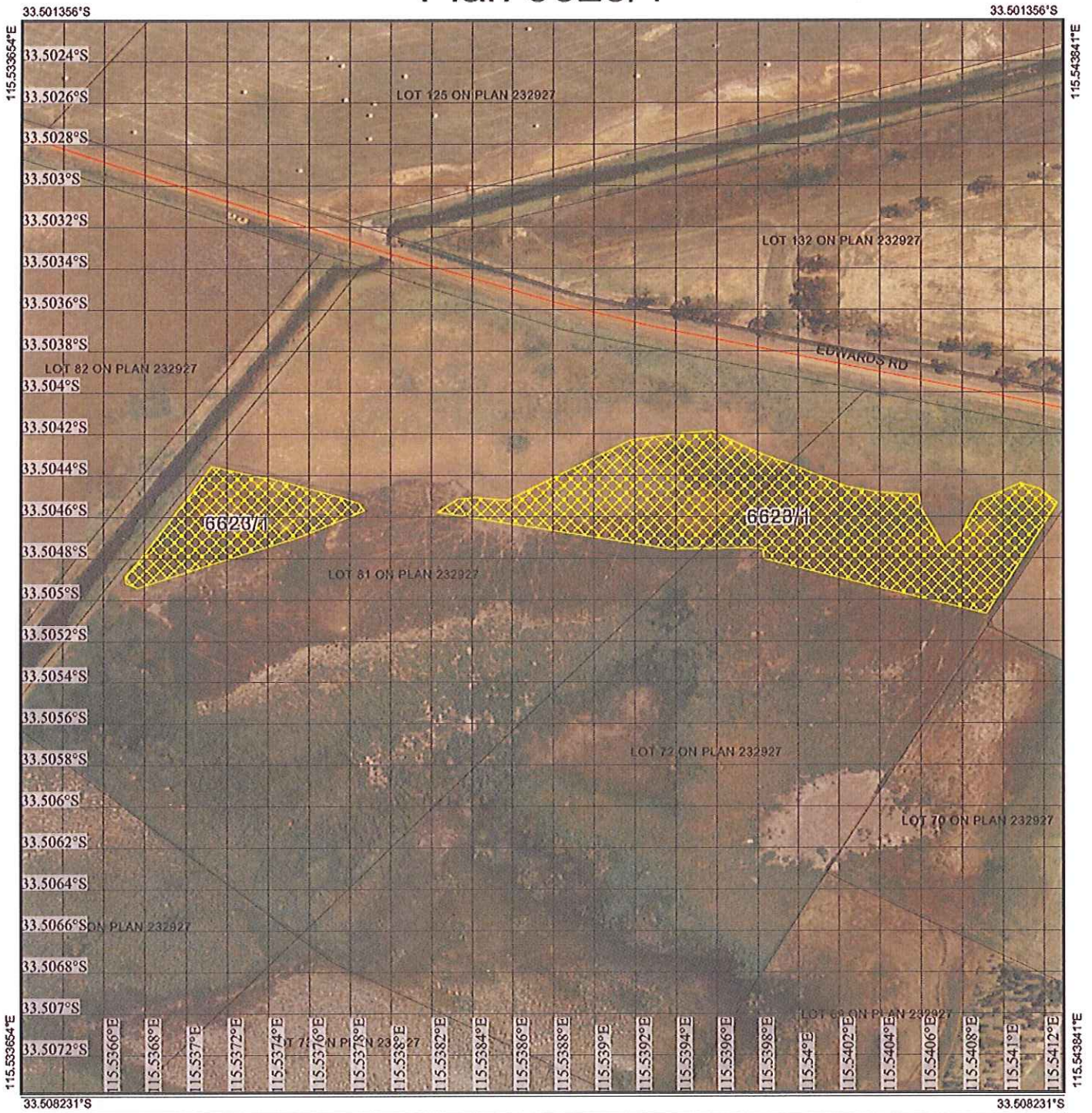


James Widenbar  
MANAGER  
CLEARING REGULATION

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

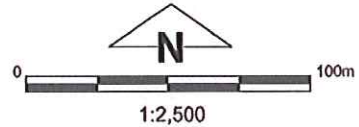
18 August 2016

# Plan 6623/1

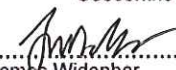


## Legend

-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Cadastre



(Approximate when reproduced at A4)  
GDA 94 (Lat/Long)  
Geocentric Datum of Australia 1994

 Date 18/8/2016  
James Widenbar

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



GOVERNMENT OF  
WESTERN AUSTRALIA  
WA Crown Copyright 2016



## 1. Application details

### 1.1. Permit application details

Permit application No.: 6623/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Mr Stuart Francis Siggers

### 1.3. Property details

Property: Lots 72 and 81 on Deposited Plan 232927, Stirling Estate  
Colloquial name:  
Local Government Authority: Shire of Capel  
DER Region: Greater Swan  
DPaW District: Blackwood  
LCDC: Capel  
Localities: Stirling Estate

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.507		Application of fill	Establishing a buffer zone

### 1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 18 August 2016

Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*.

The Delegated Officer determined that the proposed clearing is at variance to Principles (d) and (f), may be at variance to Principles (a) and (i), and is not likely to be at variance to the remaining principles. The Delegated Officer determined that the proposed clearing will impact on a threatened ecological community (TEC) and vegetation growing in association with a watercourse. Potential impacts to the TEC outside the application area will be minimised by a revegetated buffer zone.

Noting the size of the application area, condition of the vegetation and the revegetation required, the Delegated Officer determined that the construction of a revegetated buffer zone is not likely to have a significant impact on the conservation of the 'subtropical and temperate coastal saltmarsh' TEC on a local or regional scale.

The Delegated Officer determined that the proposed clearing of riparian vegetation and potential mobilisation of sediments is not likely to significantly impact the adjacent wetland values or groundwater quality. The implementation of a revegetated buffer and weed management measures will minimise impacts from the land use north of the application area to the TEC and wetland south of the application area.

The clearing permit will include conditions requiring the Permit Holder to:

- minimise the risk of the introduction and spread of weeds; and
- revegetate the permit area in accordance with a revegetation plan provided by the applicant.

Development approval for a second hand dwelling and rural pursuit (fruit trees and pasturing of livestock) was granted by the Shire of Capel on 8 August 2016. The planning approval is subject to a condition that requires the applicant to construct a stock-proof fence between the proposed land use and revegetation areas. The proposed clearing is for the purpose of creating a contoured and revegetated buffer zone.

## 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 37 is described as shrublands; teatree thicket (Shepherd et al., 2001).	The applicant proposes to clear up to 1.507 hectares of native vegetation within Lots 72 and 81 on Deposited Plan 232927, Stirling Estate, for the purpose of establishing a buffer zone.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);  To:  Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	Vegetation condition was determined during a Department of Environment Regulation site visit (DER, 2015).  The vegetation within the application area is adjacent to pasture grasses. This vegetation has been impacted by grazing pressure and is sparse.  The proposed method of clearing is via the application of clay fill over native vegetation. The clay fill is proposed to create a raised contour in order to divert storm water away from the adjacent wetland and associated native vegetation. The contour will be revegetated to create a vegetated buffer between the proposed land use and adjacent wetland.
Hedde vegetation Vasse complex is comprised of mixture of closed scrub of Melaleuca species fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) - Melaleuca species and open forest of <i>Eucalyptus gomphocephala</i> (Tuart) - <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri) (Hedde et al., 1980).			
Parks and Wildlife (2015b) advise that vegetation within the application area is likely to comprise <i>Sarcocornia quiqueflora</i> , <i>Paspalum vaginatum</i> (non-native) and pasture grasses.			

## 3. Assessment of application against clearing principles

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

#### Comments

#### Proposed clearing may be at variance to this Principle

The application area consists of 1.507 hectares of saltmarsh vegetation associated with an estuary-peripheral wetland within the Swan Coastal Plan Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This vegetation is mapped within a conservation category wetland and multiple use wetland within the Capel River consanguineous suite, however the Department of Parks and Wildlife (Parks and Wildlife) advise that vegetation proposed to be cleared is considered to comprise conservation category wetland only, while the multiple use zone is likely to occur within the adjacent area covered by pasture grasses (Parks and Wildlife, 2015b). Approximately 1.4 percent of the Capel River consanguineous suite retains conservation category values, some of which may occur within the application area (Parks and Wildlife, 2015b).

A total of 118 bird, 19 mammal, 22 reptile, seven amphibian and 29 invertebrate species have been recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-). Vegetation within the application area is associated with wetland habitat, which has ecological linkages to the Vasse-Wonnerup System Ramsar site located approximately 10.5 kilometres south-west of the application area. This Ramsar site is utilised by migratory bird species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Parks and Wildlife, 2015b). These bird species, in addition to reptile and frog species, are likely to utilise habitat within or adjacent to the application area (Parks and Wildlife, 2015a; 2015b). However, vegetation within the application area has been impacted by grazing pressure, and this combined with the limited extent of the application area and location on the periphery of native vegetation decreases the potential for the application area to support a high diversity of fauna.

A total of nine rare and 27 priority flora species have been recorded within 10 kilometres of the application area. Parks and Wildlife (2015a) advises that based on the vegetation type, soil type and condition of the vegetation proposed to be cleared, none of these species are likely to occur within the application area.

A total of nine threatened and six priority ecological communities (TECs, PECs) have been recorded within 10 kilometres of the application area. Parks and Wildlife (2015a; 2015b; 2015c) advises that the vegetation within the application area represents the 'subtropical and temperate coastal saltmarsh' TEC listed as vulnerable under the EPBC Act and ranked as a priority 3 PEC by Parks and Wildlife. The applicant proposes to conduct revegetation activities within the application area for the purpose of creating a vegetated buffer between the adjacent wetland and associated vegetation, including that belonging to the subtropical and temperate coastal saltmarsh TEC. This disturbance is unlikely to have a significant impact on the conservation of the TEC on a local or regional scale (Parks and Wildlife, 2015e).

Vegetation north of the application area comprises invasive pasture grasses (DER, 2015). Clearing activities can facilitate weed encroachment into adjacent native vegetation, which can decrease the biodiversity value of an area as weed species out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires (DEC, 2011). Potential impacts to biodiversity within and nearby the application area as a result of the proposed clearing may be minimised by the implementation of weed management practices.

Based on the above, the proposed clearing may be at variance to this Principle.

**Methodology** References:  
DEC (2011)  
DER (2015)  
Parks and Wildlife (2007-)  
Parks and Wildlife (2015a)  
Parks and Wildlife (2015b)  
Parks and Wildlife (2015c)  
Parks and Wildlife (2015e)  
Saggers (2016)

GIS Databases:  
- Imagery  
- Geomorphic wetlands  
- SAC bio datasets (Accessed September 2015)

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

The application area comprises saltmarsh vegetation in a good to degraded (Keighery, 1994) condition associated with an estuary-peripheral wetland (DER, 2015; Parks and Wildlife, 2015b). Parks and Wildlife (2015a) advises that the application area and surrounds, including a wetland south of the application area, may be significant habitat for bird species. The following migratory species listed under the EPBC Act or other specially protected fauna listed under the *Wildlife Conservation Act 1950* (WC Act) have the potential to utilise habitat within and surrounding the application area (Parks and Wildlife, 2015a):

- *Actitis hypoleucos* (common sandpiper)
- *Ardea ibis* (cattle egret)
- *Ardea modesta* (eastern great egret)
- *Calidris acuminata* (sharp-tailed sandpiper)
- *Calidris ferruginea* (curlew sandpiper)
- *Calidris melanotos* (pectoral sandpiper)
- *Calidris ruficollis* (red-necked stint)
- *Falco peregrinus* (peregrine falcon)
- *Haliaeetus leucogaster* (white-bellied sea-eagle)
- *Plegadis falcinellus* (glossy ibis)
- *Tringa nebularia* (common greenshank)

While the proposed clearing will reduce foraging habitat for the fauna species listed above, vegetation within the application area has been previously disturbed by grazing pressure and weed invasion and is not likely to comprise significant habitat for any native fauna species (DER, 2015).

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

**Methodology** References:  
DER (2015)  
Keighery (1994)  
Parks and Wildlife (2015a)  
Parks and Wildlife (2015b)

GIS Databases:  
- Geomorphic wetlands  
- Imagery

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

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

A total of nine rare flora species have been recorded within 10 kilometres of the application area (Parks and Wildlife, 2007-). Based on the habitat that occurs within the application area, no rare flora species are likely to be present (Parks and Wildlife, 2015a).

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

**Methodology**   References:  
Parks and Wildlife (2007-)  
Parks and Wildlife (2015a)

GIS Database:  
- Threatened and Priority flora

**(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**    **Proposed clearing is at variance to this Principle**

While there are no threatened ecological communities (TECs) mapped within the application area, advice received from Parks and Wildlife (2015a) indicates that vegetation proposed to be cleared belongs to the vegetation community 'subtropical and temperate coastal saltmarsh' TEC listed under the EPBC Act and ranked as a priority 3 ecological community by Parks and Wildlife. This TEC occurs in areas either under direct tidal influence or connected to tidal water bodies via groundwater, and consists of salt-tolerant vegetation including grasses, herbs, sedges, rushes and shrubs (Threatened Species Scientific Committee, 2013).

The vegetation proposed to be cleared is in a good to degraded (Keighery, 1994) condition. Parks and Wildlife (2015c) has advised that an indicator for high quality vegetation belonging to this TEC is the presence of *Melaleuca* sp. fringing vegetation, which was not present (DER, 2015). Vegetation within the application area represents a drier example of this TEC, which may become slightly waterlogged in areas during winter months (DER, 2015). Subtropical and temperate coastal saltmarsh support an abundance of insect species, which are both important pollinators and an important food resource for many fauna species (Adam, 2002; Harvey et al., 2010, 2011 as cited in Threatened Species Scientific Committee, 2013).

The Threatened Species Scientific Committee (2013) advise that this TEC is impacted by a total of 14 threatening processes, of which clearing and fragmentation is listed foremost and is considered to be exacerbated by other impacts such as infilling for infrastructure, altered hydrology and invasive species. Area critical to the survival of the TEC includes both area covered by the TEC and adjacent native vegetation that may function as a buffer (Threatened Species Scientific Committee, 2013). There is no native vegetation adjacent to this occurrence of the subtropical and temperate coastal saltmarsh TEC that may function as a buffer (DER, 2015).

The application area will be subject to revegetation activities using site-appropriate wetland vegetation over a swale constructed with clay fill to reinstate a vegetated buffer between the proposed land use to the north of the application area and the TEC and wetlands to the south (DER, 2015; Saggars, 2016).

Based on the above, the proposed clearing is at variance to this Principle. However, the proposed activities of constructing a revegetated buffer are not likely to have a significant impact on the conservation of the 'subtropical and temperate coastal saltmarsh' TEC on a local or regional scale (Parks and Wildlife, 2015e). Impacts to the TEC will be minimised by the proposed revegetation activities, which will buffer the TEC from further disturbances, including grazing pressure which has historically occurred on the property.

**Methodology**   References:  
DER (2015)  
Parks and Wildlife (2015c)  
Parks and Wildlife (2015e)  
Saggars (2016)  
Threatened Species Scientific Committee (2013)

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

The application area is located within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, in which approximately 39 per cent of the pre-European vegetation remains (see table below) (Government of Western Australia, 2014).

The vegetation within the application area has been mapped as Beard vegetation association 37 and Heddle vegetation Vasse complex. Based on available information, the vegetation proposed to be cleared more accurately represents the mapped Beard vegetation association than the mapped Heddle vegetation complex (DER, 2015). Nonetheless, approximately 35 and 32 per cent of these vegetation associations remain at a bioregional level, respectively (Government of Western Australia, 2014; Parks and Wildlife, 2015d).

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion* - Swan Coastal Plain	1,501,222	580,697	39	37
Shire* - Shire of Capel	55,945	18,654	33	45
Beard Vegetation Association in Bioregion*				
37	15,618	5,431	35	41
Heddlle Vegetation Complex **				
Vasse Complex: Closed Scrub Fringing Woodland And Open Forest	11,196	3,580	32	14

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). Neither of the two mapped vegetation associations within the application area occur at below the 30 per cent threshold within the Swan Coastal Plain bioregion.

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

**Methodology**    References:  
 DER (2015)  
 Commonwealth of Australia (2001)  
 \*Government of Western Australia (2014)  
 \*\*Parks and Wildlife (2015d)

**(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**    **Proposed clearing is at variance to this Principle**  
 Vegetation within the application area comprises coastal saltmarsh that fringes an estuary-peripheral wetland (Parks and Wildlife 2015a; 2015b). Based on data recorded during a site inspection (DER, 2015), Parks and Wildlife (2015b) advise that vegetation within the application is likely to be an extension of 'wetland community 2' which is comprised of *Sarcocornia quiqueflora*, *\*Paspalum vagintatum* and pasture grasses. Therefore, the vegetation under application is associated with the adjacent wetland. This vegetation also represents the federally listed threatened ecological community 'subtropical and temperate coastal saltmarsh', which is listed as vulnerable under the EPBC Act.

Wetland community 2 is advised to be degraded (Parks and Wildlife, 2015b). This is consistent with observations of the application area during the site inspection, with signs of grazing pressure and weed invasion present (DER, 2015).

Based on the above, the proposed clearing is at variance to this Principle. However, the proposed clearing for the purpose of a revegetated buffer zone is not likely to impact the conservation of any vegetation communities associated with a watercourse or wetland (Parks and Wildlife, 2015e).

**Methodology**    References:  
 DER (2015)  
 Keighery (1994)  
 Parks and Wildlife (2015a)  
 Parks and Wildlife (2015b)  
 Parks and Wildlife (2015e)

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

**Comments**    **Proposed clearing is not likely to be at variance to this Principle**  
 The soil type within the application area is mapped as swale formations behind coastal dunes comprised of black and grey cracking clays (Northcote et al., 1960-68). These soils are not considered likely to have a high risk of wind erosion following the removal of native vegetation (DAFWA, 2016). The application area occurs on a slight slope, and the clearing of 1.507 hectares of native vegetation may cause some water erosion following heavy rainfall. However, the application area will be subjected to an application of clay fill and revegetation activities to form a vegetated buffer between land uses to the north and native vegetation south of the application area (DER, 2015). Therefore, land degradation via water erosion as a result of the proposed clearing is not likely to be significant.



The application area is mapped as likely to have a high risk of salinity or is currently saline (DAFWA, 2016), and the applicant advises that salinity has affected adjacent properties (DER, 2015). Vegetation within the application area is part of an estuary peripheral wetland, and groundwater is likely to sit close to the surface within this area (DoW, 2015a). However, given the presence of existing salinity, the proposed clearing of 1.507 hectares of saltmarsh vegetation is not likely to significantly increase salinity within Lot 72 and 81 or surrounds.

The application area is mapped as having a high to moderate risk of acid sulphate soils (ASS). The proposed activities of applying fill to create a contour and subsequent revegetation is not likely to oxidise potential ASS.

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

**Methodology**   References:  
DAFWA (2016)  
DER (2015)  
DoW (2015a)  
Northcote et al. (1960-68)

GIS Database:  
- Acid sulphate soil risk map, Swan Coastal Plain

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

The application area is approximately 2.2 kilometres south-west of the Tuart Forest National Park, which is an A Class National Park managed by Parks and Wildlife. The application area is not connected to this National Park by an ecological linkage corridor, and the proposed clearing is therefore not likely to impact the environmental values of this conservation area.

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

**Methodology**   GIS Database:  
- Parks and Wildlife tenure

**(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 may be at variance to this Principle**

The application area is associated with an estuary-peripheral wetland. Although the application area was subject to minimal waterlogging at the time of inspection (DER, 2015), historical aerial imagery indicates that waterlogging extends up to and within the application area (Parks and Wildlife, 2015b). The clearing of 1.507 hectares via the application of clay fill within the application area may increase the level of sedimentation introduced into this wetland (Parks and Wildlife, 2015b). The risk of increased sedimentation within the wetland system will be mitigated by the revegetation activities proposed over the applied clay fill (Saggers, 2016), which will stabilise soils and create a buffer between the wetland system and anthropogenic land uses. Parks and Wildlife (2016) advises that the proposed clearing is not likely to have a significant impact on the hydrological or biological functions of the wetland system in its entirety.

While groundwater salinity within the application area is mapped as being 500 to 1,000 milligrams per litre total dissolved solids, the applicant has advised that the local area is highly saline (DER, 2015). This is consistent with salinity mapping by DAFWA (2016), which indicates that a majority of the vegetation under application has a moderate to high salinity risk or is currently saline. The clearing of 1.507 hectares of saltmarsh vegetation may impact the quality of groundwater on a local scale, however given the high probability of pre-existing salinity these impacts are not likely to be significant.

Based on the above, the proposed clearing may be at variance to this Principle.

**Methodology**   References:  
DAFWA (2016)  
DER (2015)  
Parks and Wildlife (2016)

GIS Database:  
- Geomorphic wetlands

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

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

The area under application is mapped within areas for which a small portion of the map unit has a moderate to high flood risk (DAFWA, 2016). Given the location of the application area within an estuary peripheral wetland that is likely to have groundwater occurring close to the surface (DoW, 2015a), the proposed clearing method of covering native vegetation with fill may temporarily increase runoff following periods of heavy rainfall and cause minor, localised flooding adjacent to the application area. However, the re-establishment of wetland species over fill within the application area will minimise water runoff and decrease the risk of future flooding events.

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

**Methodology** References:  
DAFWA (2016)  
DoW (2015a)

**Planning instruments and other relevant matters.**

**Comments** The applicant proposes to clear up to 1.507 hectares of native vegetation within Lots 72 and 81 on Deposited Plan 232927, Stirling Estate, for the purpose of establishing a vegetated buffer zone. The original application was to clear for the purpose of a buffer zone, an orchard, and construction of a house, shed and stables. However, during the course of the assessment it was determined that only the proposed buffer zone is located within the application area.

The applicant has advised that the buffer zone will be contoured and revegetated to separate the proposed land use and native vegetation associated with the wetland south of the application area. Local clay fill will be used to elevate the buffer zone in order to divert storm water away from the adjacent wetland and associated vegetation. House infrastructure will be based on stumps to reduce the amount of fill required (OEPA, 2015).

The application was referred to the EPA on 22 July 2015 due to potential impacts to an area subject to the former *Environmental Protection (Swan Coastal Plain Lakes) Policy Approval Order 1992*. On 24 August 2015 the EPA determined to not assess the proposal under Part IV of the *Environmental Protection Act 1986* (EP Act) and recommended that the proposal be dealt with under Part V Division 2 of the EP Act (clearing of native vegetation provisions).

The application proposes to clear up to 1.507 hectares of the federally listed TEC 'subtropical and temperate coastal saltmarsh'. This TEC is listed as vulnerable under the EPBC Act. Vulnerable ecological communities listed under the EPBC Act are not matters of environmental significance for the purposes of Part 3 of the EPBC Act (requirements for environmental approvals) (Department of the Environment, 2013).

Parks and Wildlife (2015b) advises that the proposed land use including a house, shed, stable and orchard may impact the immediate and surrounding estuary-peripheral system via altered geomorphology of the wetland area, thus potentially altering the extent of inundation. The use of local clay fill will minimise the impacts associated with the introduction of foreign sediments (Parks and Wildlife, 2016).

The Department of Water (DoW) advises that the proposed activities are not likely to impact the hydrology of the wetland system within and surrounding Lots 72 and 81 on Deposited Plan 232927 (DoW, 2015b). However, DoW notes that continued infill development within Stirling Estate will have a compounded and significant hydrological impact on the local wetland system that is likely to impact functions such as on-site water infiltration and flood detention (DoW, 2015b). DoW (2015a) also advised that they do not support the clearing of native riparian vegetation from wetland areas. Impacts to riparian vegetation will be minimised by the proposed revegetation of site-appropriate wetland vegetation within the application area (Saggers, 2016). DoW (2015a) advises that the DoW Wonnerup Wetlands and Geography Bay Water Quality Improvement Plan (Geography QUIP) (2010) classifies the Capel River as a protection catchment, which has been targeted for zero increase in nitrogen and phosphorus loads. The applicant has advised that they do not plan to use mineral fertiliser on the property, and that the use of clay fill may eliminate the risk of nitrogen and phosphates being released into the environment (OEPA, 2015).

The application area is zoned as rural. Development approval was obtained from the Shire of Capel on 8 August 2016 (Shire of Capel, 2016).

There are no Sites of Aboriginal Significance mapped within the area applied to clear.

The clearing permit application was advertised in *The West Australian* on 6 July 2015 for a 21 day submission period. No submissions were received.

**Methodology**    **References:**  
Department of the Environment (2013)  
DoW (2015a)  
DoW (2015b)  
OEPA (2015)  
Parks and Wildlife (2015b)  
Parks and Wildlife (2016)  
Saggers (2016)  
Shire of Capel (2016)

GIS Database:  
- Aboriginal Sites Register System

#### 4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DAFWA (2016) NRMinfo Mapping Tool. Department of Agriculture and Food Western Australia.  
<http://maps.agric.wa.gov.au/nrminfo/framesetup.asp>. Accessed September 2015.
- DEC (2011) Invasive Plant Prioritisation, Department of Environment and Conversation, Perth.
- Department of the Environment (2013) Matters of National Environmental Significance: Significant impact guidelines 1.1. Commonwealth of Australia, Canberra.
- DER (2015) Site inspection report. Department of Environment Regulation. DER REF: A973451.
- DoW (2015a) Advice received from the Department of Water on 21 July 2015. DER REF: A938072.
- DoW (2015b) Advice received from the Department of Water on 8 December 2015. DER REF: A1050750.
- Heddl, 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.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.
- 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.
- OEPA (2015) Further information provided by the Office of the Environmental Protection Authority regarding proposal CMS15201. DER REF: A977204.
- Parks and Wildlife (2007- ) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed September 2015.
- Parks and Wildlife (2015a) Flora, fauna, TEC and regional advice received from the Department of Parks and Wildlife on 24 July 2015 (DER REF: A941715).
- Parks and Wildlife (2015b) Wetland advice received from the Department of Parks and Wildlife on 28 July 2015 (DER REF: A941704).
- Parks and Wildlife (2015c) Regional advice received from the Department of Parks and Wildlife on 15 July 2015 (DER REF: A973486).
- Parks and Wildlife (2015d) 2015 South West Forest and Swan Coastal Plain Vegetation Complex Statistics: a report prepared for the Department of Environment Regulation. Current as of March 2015. Department of Parks and Wildlife, Perth, Western Australia.
- Parks and Wildlife (2015e) TEC advice received from the Department of Parks and Wildlife on 23 December 2015. DER REF: A1050149.
- Parks and Wildlife (2016) Wetland advice received from the Department of Parks and Wildlife on 15 January 2016. DER REF: A1035644.
- Saggers, S. (2016) Revegetation Plan received from the applicant on 17 February 2016. DER REF: 1053427.
- 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.
- Shire of Capel (2016) Development approval provided by the Shire of Capel on 8 August 2016. DER REF: A1148788.
- Threatened Species Scientific Committee (2013) Subtropical and Temperate Coastal Saltmarsh Conservation Advice. <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/118-conservation-advice.pdf>. Accessed September 2015.