



## CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

### PERMIT DETAILS

Area Permit Number: 8226/1  
File Number: DWERVT1650  
Duration of Permit: From 19 April 2020 to 19 April 2027

### PERMIT HOLDER

Hulme Developments Pty Ltd

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 2 on Diagram 55827, Witchcliffe

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.55 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8226/1a.

### CONDITIONS

#### 1. Period in which clearing is not authorised

- (a) The Permit Holder shall not clear any native vegetation from 1 September to 30 November of each calendar year (*Geocrinia alba* breeding period).
- (b) The Permit Holder shall not clear any native vegetation from 19 April 2022.

#### 2. 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.

#### 3. 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 known *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.

#### 4. Fauna habitat management – fauna spotter

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must:

- (a) engage a *fauna specialist* to be on site 48 hours prior to clearing to identify and locate any western ringtail possum's (*Pseudocheirus occidentalis*); and
- (b) where WRPs are identified within condition 4(a) the *fauna specialist* must remove and relocate the fauna to remnant vegetation immediately adjacent.

**5. Fauna habitat management- pre-clearing sediment control**

The Permit Holder must install *sediment control measures* prior to clearing to reduce the potential impact of sedimentation of the waterway and associated downstream indirect impacts upon the *G. alba* population.

**6. Fauna habitat management- pre-rainfall sediment control inspection**

The Permit Holder must inspect *sediment and runoff control measures* when a *significant rainfall event* is predicated to occur and implement *mitigation measures* to immobilise sediment within runoff areas from the clearing activities from flowing into the watercourse.

**7. Rehabilitation Plan development - long-term sediment control**

- (a) Prior to clearing the Permit Holder shall engage an *environmental specialist* to develop a *Rehabilitation Plan* for the establishment of 50m *riparian vegetation buffers* that are immediately adjacent to the areas hatched red on Plan 8226/1b;
- (b) Within 12 months of the commencement of clearing under this Permit, the Permit Holder shall provide the Rehabilitation Plan prepared in accordance with condition 7(a) of this Permit to the CEO.
- (c) The *Rehabilitation Plan* specified under condition 7(a) of this Permit shall:
  - i. include quantitative *completion criteria* based on riparian vegetation within 10km of the application area, in accordance with the methodology described in the Department of Water and Environmental Regulations ‘*A Guide to Preparing Revegetation Plans for Clearing Permits*’;
  - ii. Meet the below completion criteria after a five year monitoring period.

| Criterion | Aspect                      | Scale                   | Completion criteria  | Monitoring frequency |
|-----------|-----------------------------|-------------------------|--|----------------------|
| 1         | Per cent weed cover         | Average of quadrat data | <=20 percent cover of weeds  | Annually             |
| 2         | Declared weeds              | Site traverse           | Absence of declared weeds  |                      |
| 3         | Per cent bare ground        | Average of quadrat data | <=20 percent bare ground   |                      |
| 4         | <i>Vegetation condition</i> | Site traverse           | The condition of the vegetation to be in a very good condition (Keighery, 1994) or better. |                      |

- iii. undertaking a weed control program;
- iv. establishing six 5 x 5 metre quadrat monitoring sites within the 50m riparian vegetation buffer;
- v. implementing hygiene protocols by cleaning earth-moving machinery of soil and vegetation prior to entering and leaving the site;
- vi. undertake biannual weed control activities.

**8. Rehabilitation – contingency**

The Permit holder will undertake remedial actions for the *riparian vegetation buffer* under condition 7(a) of this Permit, where monitoring indicates that rehabilitation has not met the *completion criteria* specified under condition 7(c)(ii) of this Permit; including but not limited to:

- (i) undertake further weed control activities;
- (ii) undertake further infill planting activities; and
- (ii) continued annual monitoring of each rehabilitated area, until the *completion criteria* outlined in condition 7(c)(ii) of this Permit are met.

## 9. Retain vegetative material and topsoil

The Permit Holder shall;

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared;
- (b) within 1 month following clearing authorised under this Permit, *revegetate* and *rehabilitate* the areas that are no longer required for the purpose for which they were cleared under this Permit by;
  - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
  - (ii) laying the vegetative material and topsoil retained under condition 7(a) on the cleared areas

## 10. Management intervention – trigger point

The Permit Holder must bypass flows in the watercourse from 1 June to 30 November of each calendar year if notified by the *CEO* that a reduction in the *G. alba* sub-population size *index of abundance* has been detected by the Department of Biodiversity, Conservation and Attractions monitoring program.

## 11. Records must be kept

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

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) 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;
  - (ii) the date that the area was cleared;
  - (iii) the size of the area cleared (in hectares);
  - (iv) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 2 of this Permit;
  - (v) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 3 of this Permit;
  - (vi) the date and outcomes regarding the presence of any WRP in accordance with condition 4 of this Permit;
  - (vii) photographic evidence and geographical coordinates of the pre-clearing sediment control measures in accordance with condition 5 of this Permit; and
  - (viii) date and rainfall total for *significant rainfall events* in accordance with condition 6 of this Permit.
- (b) In relation to the *rehabilitation* of areas pursuant to conditions 7 and 8 of this Permit:
  - (i) a description of the *rehabilitation* activities undertaken;
  - (ii) the size of the area *rehabilitated* (in hectares);
  - (iii) the date that *rehabilitation* works began; and
  - (iv) actions taken in accordance with conditions 7, 8 and 9.

## 12. Reporting

- (a) The Permit Holder must provide to the *CEO* on or before 30 June of each year, a written report:
  - (i) of records required under condition 11 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (a) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar a written report confirming that no clearing under this permit has been carried out, must be provided to the *CEO* on or before 30 June of each year.

## 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*;

**completion criteria (quantitative)** means a measurable outcome based on an ecological appropriate *reference site*, used to determine revegetation/*rehabilitation* success;

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

**direct seeding** means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

**environmental specialist:** means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an *environmental specialist* is required to provide under this Permit, or who is approved by the CEO as a suitable *environmental specialist*.

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

**index of abundance** means a relative measure of the size of a population or sub-population as measured by a number per standard unit of survey effort.

**local provenance** means native vegetation seeds and propagating material from natural sources within 10 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared.

**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;

**monitoring program** means a project designed by a biometrician that can detect statistically significant changes in species counts, using either a population count or index of abundance.

**mitigation measures** means actions which occur on-site as part of the project and reduce the direct impact of that project.

**planting** means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

**quadrat** means a sample plot established for the purpose of data collection and monitoring vegetation characteristics, for example species composition, structure, density and condition;

**reference site** means a site used to provide baseline data for planning a revegetation project. Measurements from fixed reference points or plots where biodiversity components are measured are used to set measurable *completion criteria* for revegetation projects. *Reference sites* are to be in at least very good condition (Keighery 1994);

**regenerate/ed/ion** means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

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

**rehabilitation plan** means a plan prepared by the permit holder, or an appropriate *environmental specialist* delegated by the permit holder, for the *rehabilitation* of a site in accordance with a permit condition;

**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.

**riparian vegetation buffer** means an area of contiguous vegetation immediately adjacent to a watercourse that provides the function of soil stabilisation to reduce topsoil movement in rainfall events.

**sediment control measures** means the installation of earth bunds, hay bales or similar, to act as sediment traps to prevent the movement of sediments in waterways. Additionally this includes re-vegetation of riparian vegetation for long-term soil stabilisation (see riparian vegetation buffer).

**self-sustaining vegetation** means vegetation that has reached the required completion criteria and requires little if any further intervention to fulfil its desired function

**significant rainfall event** means 40 millimetres of rainfall, or greater is predicted by the Bureau of Meteorology, within a 24 hour period.

**vegetation condition** means the rating given to native vegetation which refers to the impact of disturbance on each of the layers and the ability of the community to regenerate (Keighery 1994);

**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.



Mathew Gannaway  
SENIOR MANAGER  
NATIVE VEGETATION REGULATION

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


20 March 2020

CPS 8226/1 - Plan 1a



Legend

- CPS areas approved to clear
- Local Government Authorities
- Cadastre
- Hydrography - Inland Waters - Waterlines
  - Mainstream, Perennial
  - Major River, NA
  - Major River, Nonperennial
  - Major River, Perennial
  - Minor River, NA
  - Minor River, Nonperennial
  - Minor River, Perennial
  - NA
  - Unknown

  
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1: 9,932

CPS 8226/1 - Plan 1b



Legend

- ⊠ CPS subject to conditions
- Local Government Authorities
- Cadastre
- Hydrography - Inland Waters - Waterlines
  - Mainstream, Perennial
  - Major River, NA
  - Major River, Nonperennial
  - Major River, Perennial
  - Minor River, NA
  - Minor River, Nonperennial
  - Minor River, Perennial
  - NA
  - Unknown

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 8226/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Hulme Developments Pty Ltd  
Application received date: 22 October 2018

### 1.3. Property details

Property: Lot 2 on Diagram 55827, Witchcliffe  
Local Government Authority: Shire of Augusta-Margaret River  
Localities: Witchcliffe

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | Purpose category: |
|--------------------|-----------|--------------------|-------------------|
| Revised to 0.55    | 0         | Mechanical Removal | Dam construction  |

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 20 March 2020

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* (EP Act). It has been concluded that the proposed clearing is at variance with Principle (f), may be at variance with Principles (b) and (i), and is not likely to be at variance with the remaining principles.

The Delegated Officer determined that the proposed clearing may impact on the habitat of *Geocrinia alba* (White-bellied frog) through alterations in stream hydrology resulting in indirect impacts on downstream water quality and hence, breeding habitat. To minimise impacts to hydrology and water quality, the clearing permit contains conditions including:

- the restriction of clearing to avoid the breeding season of the species;
- the restriction of clearing beyond April 2022;
- the installation of sediment control (silt traps) prior to clearing;
- to inspect sediment controls prior to significant rainfall events to ensure integrity;
- rehabilitation of a 50m riparian vegetation buffer to promote long-term sediment control;
- contingencies should rehabilitation fail to meet completion criteria; and
- a trigger value requiring an increase in bypass flows should the population size be detected to decrease through the Department of Biodiversity, Conservation and Attractions *G. alba* monitoring program.

The proposed clearing area also contains suitable habitat for *Pseudocheirus occidentalis* (Western Ringtail Possum) (WRP). To mitigate impacts to WRP individuals, the applicant will be required to engage a fauna specialist to conduct a pre-clearance search of the application area for WRP's, with a requirement to cessate clearing should any WRP's be identified, until such time that they have been removed and relocated into adjacent remnant vegetation, or move on independently.

The Delegated Officer determined the proposed clearing to be at variance with Principle (f), due to native vegetation growing in association with the creek that intersects the application area. Whilst the proposed clearing will impact riparian vegetation, noting the condition and size of the proposed clearing, in addition to the mitigation measures regarding sediment control, impacts are not likely to be significant.

The applicant obtained a *Rights in Water and Irrigation Act 1914* (RIWI Act) section 17 permit to construct a dam and section 5C license to take water within the creek that intersects the application area.

After consideration of the above, 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.



Given the above, the Delegated Officer decided to grant a clearing permit subject to weed and dieback management, fauna habitat management (sedimentation control), riparian rehabilitation and adaptive management intervention.

## 2. Site Information

|                                  |   |
|----------------------------------|---|
| <b>Clearing Description:</b>     | The application is for the proposed clearing of 0.55 hectares of native vegetation within Lot 2 on Diagram 55827, Witchcliffe, for the purpose of dam construction for farm water supply and crop irrigation (Figures 1 and 2).   |
| <b>Vegetation Description</b>    | <p>The vegetation within the application area is mapped as Wilyabrup; Margaret River Plateau vegetation complex which is described as; 'Tall open forest of <i>Eucalyptus diversicolor</i>-<i>Agonis flexuosa</i>-<i>Callistachys lanceolata</i> with some <i>Corymbia calophylla</i> on flats and valleys in the hyperhumid zone' (Mattiske, 1998).</p> <p>A Department of Water and Environmental Regulation (DWER) site inspection determined the application area to be open, consisting predominately of planted peppermint trees (<i>Agonis flexuosa</i>) and <i>Taxandria</i> sp. (not planted) growing along the perennial watercourse. Vegetation along the creek has been planted but there is evidence of regeneration (DWER, 2018).</p> |
| <b>Vegetation Condition</b>      | <p>Based on the DWER site inspection (2018), the vegetation under application is considered to be in Good to Degraded condition following Keighery (1994) described as:</p> <ul style="list-style-type: none"> <li>• Degraded: Basic vegetation structure severely impacted by disturbance; scope for regeneration but not to a state approaching Good condition without intensive management (Keighery 1994);</li> <li>• Good: Vegetation structure significantly altered by very obvious signs of multiple disturbance; retains basic s</li> </ul>  |
| <b>Landform/Soil Description</b> | The area under application has been mapped as Wilyabrup narrow valley floor Phase which is described as 'Narrow V-shaped drainage depressions'. The soils are characterised as loamy gravels, duplex sandy gravels, stony soils, brown deep loamy duplexes and friable red/brown and brown loamy earths (Schoknecht et al., 2004).  |
| <b>Comments</b>                  | The local area is defined as a ten kilometre radius measured from the perimeter of the application area. A review of available databases has determined that the local area retains approximately 51 per cent of its pre-European clearing extent.  |



Figure 1: Area under application (revised to 0.55ha)



Figure 2: Vegetation surrounding the application area

## 3. Minimisation and mitigation measures

The applicant reduced the application area to exclude vegetation that may be used as Black cockatoo foraging or breeding habitat. This reduced the application area from 0.71 hectares down to 0.55 hectares.

Impact to the downstream population of *G. alba* may be mitigated by the following (DBCA, 2020):

- installation of an automatic flow bypass systems capable of delivering 340kL/day;
- all summer flows to be bypassed;
- clearing to be undertaken outside the breeding season (outside of 1 September to 30 November);
- the installation of sediment control (silt traps) prior to clearing;
- to inspection of sediment controls prior to significant rainfall events;

- rehabilitation of vegetation within and around the dams; and
- an increase in bypass flows should the population size be detected to decrease through the Department of Biodiversity, Conservation and Attractions White-bellied frog monitoring program.

#### 4. Assessment of application against clearing principles and planning instruments and other matters

According to available databases, one threatened flora species and 16 priority flora species have been recorded within the local area. *Reedia spathacea* (Threatened), *Synaphea macrophylla* (Priority 1), *Synaphea* sp. Redgate Road (J. Scott 16) (Priority 1) and *Tetralia* sp. Nannup (P.A. Jurjevich 1133) (Priority 1) have been mapped as occurring within the same soil and vegetation types than that mapped within the application area. According to advice provided by the Department of Biodiversity, Conservation and Attractions (DBCA, 2018), the proposed clearing is not likely to impact on any flora currently considered threatened. Given the above and the small size of the application area, the proposed clearing is not likely to impact on the conservation status of these flora species.

According to available databases, 12 threatened fauna species, one fauna species protected under international agreement, three Priority 4 fauna species, two Priority 1 fauna species and one fauna species classified as specially protected fauna, have been recorded within the local area (DBCA, 2007-). Of the threatened or priority species identified, it is likely that the area under application contains habitat for the western ringtail possum (*Pseudocheirus occidentalis*) and the White-bellied frog (*Geocrinia alba*).

Western ringtail possum (WRP) is listed as Critically Endangered under the *Biodiversity Conservation Act 2016* (BC Act). A DWER site inspection confirmed the presence of WRP habitat within the application area (DWER, 2018). Given that *Agonis flexuosa* are considered critical habitat to WRP, the application area comprises habitat for WRP. Advice provided by DBCA (2018), state that if WRP are present, the density of animals will be low. Given the above and small size of the application area, the proposed clearing will not have a significant impact on WRP habitat. If WRP are present, the application area is surrounded by substantial contiguous vegetation to allow for dispersal. To mitigate impacts to WRP individuals, the applicant will be required to engage a fauna specialist to conduct a pre-clearance search of the application area for WRP's, with a requirement to cease clearing should any WRP's be identified, until such time that they have been relocated to remnant vegetation immediately adjacent, or move on independently.

The proposed clearing may impact a translocated population of *G. alba*, listed as Critically Endangered under the BC Act. The area under application is approximately 800 metres upstream of a newly established white-bellied frog translocation site. This site was established in 2016 and had 114 individuals released (DBCA, 2018). Success as a self-maintaining breeding population will not be able to be established until the released individuals reach breeding age (approximately four years). Genetic studies suggest that there is very little migration amongst and between populations with current levels of gene flow approaching zero. This is consistent with a mark-recapture study that found 95% of male frogs moved less than 5 metres between seasons in a year and less than 20m between years. Approximately 60 discrete *G. alba* sub-populations exist and due to the lack of dispersal and gene flow the sub-populations no longer function as a meta-population (Threatened Species Scientific Committee, 2019).

The breeding biology of the *G. alba* makes it particularly susceptible to changes in local hydrology. Altering surface and/or sub-surface water flow may lead to desiccation or flooding of habitat. Clearing of vegetation and construction of dams can all have impacts on surface and sub-surface stream-flows (Threatened Species Scientific Committee, 2019). Furthermore, early results from a current study support the micro-climate hypothesis - nearby sites where the frogs don't occur or have become extinct were drier and experienced more extreme temperatures over the summer months (Hoffman, 2019). Additionally, given the observed 19% decrease in winter rainfall in the south-west since the 1970's, ongoing impacts from climate change are anticipated to place additional pressure on sub-populations of *G. alba* (Threatened Species Scientific Committee, 2019). Modelling by CSIRO indicates that under the median future climate, runoff in the south-west is expected to decrease by 20-30 percent (CSIRO 2009). The *G. alba* lifecycle is completed within moist soil and has no free swimming or feeding stage – a reproductive strategy known as direct development (Threatened Species Scientific Committee, 2019). Given this, DBCA has advised that the optimal requirements of the breeding success of white bellied frog is soil moisture of at least 40% per year-round, including throughout the drier February-May period (DBCA, 2020). DBCA further advised that the implementation of an automatic summer flow bypass system in the proposed dams may mitigate impacts to flow regime and may be sufficient to maintain summer flows and soil moisture during the dry summer period. The RIWI Act licence will condition the installation of an automatic bypass system for the dams that is capable of delivering 340kL/day. To also meet DBCA advice, the licence will be conditioned so that all summer flows are bypassed (DBCA, 2020). In addition to above, the clearing permit includes mitigation measures based on DBCA advice including:

- the restriction of clearing to avoid the breeding season for the species (outside of 1 September to 30 November);
- the restriction of clearing beyond April 2022;
- the installation of sediment control (silt traps) prior to clearing;
- to inspection of sediment controls prior to significant rainfall events;
- an increase in bypass flows should the population size be detected to decrease through the DBCA White-bellied frog monitoring program;
- establishment of a self-sustaining riparian vegetation buffer (at least 50m in width) that includes the area immediately adjacent to any clearing, to provide long term soil stabilisation; and
- inclusion of contingency measures should rehabilitation not meet the required completion criteria prior to permit expiry.

Noting that the vegetation within the application area contributes to maintenance of a significant habitat for *G. alba*, the proposed clearing may result in the loss of significant fauna habitat, even with the above mitigation measures. This is due to the sedentary nature of the species with each population being discrete with close to zero genetic flow, its reliance on an appropriate soil moisture content and sensitivities to changes in hydrology and water quality. The proposed clearing may be at variance with Principle (b). No threatened ecological communities (TEC) have been mapped within the local area. One PEC has been mapped within the local area approximately 9.3km to the SE of the application area. Therefore the proposed clearing does not comprise the whole or part of, or is necessary for the maintenance of a TEC or PEC.

The National Objectives Targets for Biodiversity Conservation include targets to prevent the clearance of ecological communities with extents below 30 per cent of their pre-European extent (Commonwealth of Australia, 2001). The application area falls within Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and is mapped as the South West (previously Mattiske) Wilyabrup (Margaret River Plateau) vegetation complex, retaining 53.41 per cent and 63.47 per cent of their pre-European vegetation extents respectively (Government of Western Australia, 2018a; Government of Western Australia, 2018b). Given these extents are above 30 per cent, the application area is not considered a significant remnant in an area that has been extensively cleared.

According to available databases, a minor, non-perennial watercourse (a tributary to the Blackwood River) intersects the application area. The proposed clearing will impact vegetation growing in association with this watercourse and may result in altered hydrology and decreased water quality through sedimentation both within the application area and downstream. Impacts on hydrology and water quality through clearing may impact on the translocated population of *G. alba* as discussed previously. These changes are noted as a key threat to the remaining sub-populations of *G. alba* (Threatened Species Scientific Committee, 2019).

Vegetation removal may lead to a deterioration in the quality of surface water through sedimentation both at the application area and downstream. The above-mentioned mitigation measures may reduce the risk of impact to water quality both at the application area and downstream at the translocated *G. alba* site.

According to available databases, the closest conservation area is Wooditjup National Park, which occurs approximately 4433 metres north of the application area. Given the distance from the national park and small area under application (0.55ha), the proposed clearing is not considered to have an impact on the environmental values of any adjacent or nearby conservation areas.

Given the above, the proposed clearing is at variance with principle (f), may be at variance with principles (b) and (i) and is not likely to be at variance with the remaining clearing principles.

#### **Planning instruments and other relevant matters.**

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 01 November 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

DWER's South West Region has advised that due to the small size of the clearing, the clearing is to be of low risk from a water resources perspective, particularly if the clearing is to occur during the dry period when flows are at their lowest (DWER, 2018b).

In regards to the concern about impacts to summer flows, as mentioned it is a general principle for licensing on-stream dams in the SW Capes area that dams are only allowed to be filled by winter stream flows and that any summer flows are not touched. This is to ensure that these important low flows are maintained to service the environmental water requirements of the system. This is achieved by licences being conditioned to only authorise take to fill dams over the winter flow period and any summer flows are bypassed (DBCA, 2020).

There will be two instruments issued under RIWI Act; a section 17 permit to construct the dam and a section 5C licence to take water. Finalised bypass designs have been submitted to DWER by the applicant and are acceptable to allow the water license to be issued. The permit will include conditions on the installation and operation of the bypass system (DWER, 2020).

## **5. References**

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra Department of Biodiversity, Conservation and Attractions (DBCA) (2007- ) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed October 2018
- Department of Biodiversity, Conservation and Attractions (DBCA) (2020) Species & Communities advice for CPS 8226/1 received 19 February, 2020, Perth (A1870196).
- Department of Biodiversity, Conservation and Attractions (DBCA) (2018) Regional device for CPS 8226/1 received 4 December 2018, Perth (DWER A1747745).
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- Department of Water and Environmental Regulation (2018b) Water Online Advice, received 2 November 2018. Department of Water and Environmental Regulation, Western Australia (DWER A1735306).
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## **6. GIS databases**

- Aboriginal sites of significance
- Department of Biodiversity, Conservation and Attractions,
- DBCA Species & Communities datasets accessed October 2019
- DBCA estate
- Hydrography linear
- Land degradation risk categories
- Remnant vegetation
- Topographic contours
- Wetlands