

Clearing assessment report, Wallcliffe Road Cycle Path Reconstruction



File reference: RDS/0110

BACKGROUND

The Shire of Augusta Margaret River proposes to reconstruct and widen a 1.27 km section of the existing Wallcliffe Road cycle path in Margaret River, as shown in the accompanying maps, resulting in the clearing of up to 0.3 ha of native vegetation.

Wallcliffe Cycle Path is identified as a Primary cycle route in the *Leeuwin-Naturaliste 2050 Cycling Strategy* (copy attached). This is the highest level of cycle route in the regional route hierarchy, providing cyclists with safe and uninterrupted journeys. Primary routes predominately consist of high-quality, shared paths at least 3 metres in width.

The existing Wallcliffe cycle path runs parallel to Wallcliffe Road for a total of 7 km, connecting the townsites of Margaret River and Prevelly. The path receives significant foot and cycle traffic, and is popular with both local residents and tourists. It currently provides the only safe pedestrian access between Margaret River and Prevelly, and passes through a range of landscapes, including open parkland, jarrah/marri forest and coastal heath. At its western extent, the cycle route includes elevated, sweeping views of Wooditjup Bilya (the Margaret River) and coastal views of limestone cliffs and beaches.

The path was originally constructed to a width of 1.8 metres, which is not sufficient to allow the safe two-way passage of cycle and pedestrian traffic. Given the age and high level of use the existing path, the surface has become degraded, cracked and uneven, causing a safety hazard in some sections. Sections of the path have been upgraded and widened to 3 metres in recent years by the Shire, where they do not traverse native vegetation, and therefore have not required a clearing permit. The last remaining 1.27 km section of path needing upgrade passes through a corridor of remnant native vegetation, and may involve minor clearing to facilitate the reconstruction works.

The proposed clearing area runs along the existing edge of the cycle path in a section east of Caves Road. The clearing is entirely within Shire-managed land, including Road Reserves, a Public Recreation Reserve (R37326), and a Recreation Reserve (R12646). It is proposed to reconstruct and widen the path in this section from 1.8 metres to a maximum of 2.5 to 3 metres. The upgrade has been specifically designed to minimise clearing, however it has been identified that up to 0.3 ha of vegetation may be disturbed in order to facilitate the works. There will be no removal of trees considered to be habitat trees (50 cm DBH and above).

BIODIVERSITY VALUES

Flora and Vegetation

The vegetation along the 1.27 km path alignment is a mix of good to very good condition native remnant Jarrah-Marri forest and Low Peppermint forest with degraded pockets. The existing location of the cycle path is highly modified and for the most part includes an adjoining degraded maintenance strip.

Broadscale vegetation complex mapping (Government of Western Australia, 2019. *2018 South West Vegetation Complex Statistics*. Current as of March 2019) identifies that vegetation within the project area is within the following vegetation complexes:

- Cowaramup (C1) – Open to tall open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla*-*Banksia grandis* on lateritic uplands in the hyperhumid zone. **34.46% pre-European extent remaining.**
- Wilyabrup (W1) – Tall open forest of *Eucalyptus diversicolor*-*Corymbia calophylla*-*Allocasuarina decussata*-*Agonis flexuosa* on deeply incised valleys in the hyperhumid zone. **53.67% pre-European extent remaining.**
- Wilyabrup (Ww1) – Tall open forest of *Eucalyptus diversicolor*-*Agonis flexuosa*-*Callistrachys lanceolata* with some *Corymbia calophylla* on flats and valleys in the hyperhumid zone. **53.71% pre-European extent remaining.**

A number of high priority environmental weeds occur within the site including Arum lily (*Zantedeschia aethiopica*), Early black wattle (*Acacia decurrens*), Flinders Range Wattle (*Acacia iteaphylla*) and Sydney golden wattle (*Acacia longifolia*). Various garden-escapees also occur in the site, as well as a small number of introduced eucalypts that have been purposely planted, including blue gum and bushy yate.

No Threatened or Priority Flora or Ecological Communities have been recorded within the proposed permit area or nearby, based on a desktop review of DBCA WA Herbarium datasets. The closest record of threatened or priority flora is approximately 600 m to the north on private property. DRF species *Caladenia excelsa* occurs approximately 700 m to the north along Caves Road. The cycle path is well frequented, and rare or priority flora are not known to occur in its vicinity.

Given the very small scale of disturbance, and good local knowledge of the flora occurring along this well-frequented cycle path, it was not considered necessary to undertake a flora survey in the project area. Site inspections were undertaken by Shire Environment and Landcare Officers, which included observations of flora and vegetation, and a fauna survey was undertaken (see detail below), which included information on vegetation types.

Fauna

A search of the DBCA threatened species database identified 65 records of the critically endangered Western Ringtail Possum (*Pseudocheirus occidentalis*) occurring within a 2km radius of the project area, dating back to 2007. A majority of these records are around the Margaret River townsite, however two records relate directly to sightings within the clearing area.

The Shire of Augusta Margaret River subsequently commissioned a Western Ringtail Possum Habitat Assessment and Survey for a 3.1 km transect along the cycle path from Caves Road to the Yalgardup Brook, encompassing the 1.27 km clearing permit section, as well as sections that have already been widened (Litoria Ecoservices, 2020).

Based on the habitat assessment and 3 nights of spotlighting survey, it was confirmed, through scat, drey, and spotlighting records, that WRP occurs in the project area. Scat was found in multiple locations along the survey transect, but in significantly higher densities within the western most portion of the proposed clearing area. A total of four WRP dreys were observed along the project area, all within peppermint trees (*Agonis flexuosa*). The observation of

juveniles along the transect and within the project area suggests that the area could represent breeding habitat.

The same survey confirmed the presence of the Conservation Dependent brush tailed phascogale along the cycle path, although it was not recorded along the proposed clearing area.

In addition, trees were surveyed along the alignment and assessed for habitat status for black cockatoo species. A total of 338 trees (including introduced species, but predominately native) were surveyed within 6 metres either side of the path alignment, including jarrah, marri, blackbutt and peppermint trees. 58 (or 17%) of these trees were measured in size as being 50cm DBH or above, and therefore potentially habitat trees.

As mentioned above, a majority of the path includes an adjoining degraded/maintenance strip of approximately 2 metres or greater, and therefore the number of trees likely to be impacted by the path upgrade will be minimal. Habitat trees greater than 50cm DBH in particular will not be removed, which has been incorporated into the project design.

POTENTIAL IMPACTS

Flora and Vegetation

The clearing of up to 0.3 ha of vegetation along the 1.27 km section of Wallcliffe cycle path is unlikely to have an impact on significant flora or vegetation values. There are no known records of threatened or priority flora or ecological communities within the clearing area or nearby that will be impacted by the proposed clearing.

The path upgrade and widening project has been designed to avoid or otherwise minimise clearing of intact native vegetation. The design of the alignment took into account the location of trees and native vegetation, and utilises already cleared or degraded areas where possible as an alternative to clearing intact vegetation. For the most part, the path includes an adjacent maintenance strip, and the project design involves widening within this clear area where possible.

Where habitat trees are located within the clearing corridor, the width of the path will be pinched in and reduced to 2.5 metres to avoid tree removal. This negates the need to remove any trees over 50cm DBH. Some smaller or juvenile trees, mostly peppermint tree and marri, have re-established along the edge of the path. Disturbance to these plants will be minimised where possible. Thirteen trees of below 50cm DBH have been identified that may need removal during path reconstruction.

During earthworks, smaller machinery will be used in order to minimise disturbance. Where trees are located immediately adjacent to the path, hand trenching will be undertaken instead of using machinery in order to minimise disturbance to roots.

Grass trees and sedges will be avoided where possible, but any that require removal will be relocated to nearby areas along the path. The Shire has also planned a revegetation project within the cycle path reserve (Reserve No. 37326), which will involve weed control and planting 360 native seedlings local to the project area.

In addition, existing drainage patterns will be maintained, with no significant build up of soil, and the grade of the path will remain similar to present. Best practice weed hygiene measures will be implemented during earthworks and construction activities to avoid the introduction and spread of weeds.

The path crosses a drainage line at the western extent of the alignment, which is a tributary of the Margaret River. There may be need to replace the culverts in this section, and the Shire will

apply for a Bed and Banks Permit under the *Rights in Water and Irrigation Act 1914* from the Department of Water and Environmental Regulation if this is the case. The existing pedestrian bridge over the drainage line will not be altered as part of the reconstruction project.

Fauna

It is not expected that the small amount of clearing along the pathway edge will have a significant impact on threatened fauna or fauna habitat.

A total of 58 potential habitat trees (DBH 50cm or greater) were surveyed within 6 metres of the existing pathway edges. None of these trees will be removed as part of the project. No more than thirteen smaller or juvenile trees will need removal that are growing immediately adjacent to the current path edge and are within the clearing zone (see Attachment 1). These are mostly peppermint and marri trees, and are under 50cm DBH in size. All efforts will be made to avoid removal of trees, and where required the path will reduce to 2.5 metres in width in sections to avoid tree removal.

Five of the thirteen trees that may need removal are peppermint trees that have established around the culvert at the western end of the project area, and may be disturbed if works are undertaken to remediate or replace the culvert.

Given the above, it is unlikely that there will be significant impacts to threatened species such as western ringtail possum, brush tailed phascogale, or black cockatoo species. Large and mature trees that are of size to potentially provide nesting habitat for black cockatoo species will be retained and protected. While there may be a small level of removal of smaller juvenile trees along the path edge, the scale of clearing and small size of the trees will not be significant enough to impact canopy cover or connectivity along the cycle path for species such as WRP or brush tailed phascogale. Pruning will be undertaken as an alternative to tree removal where possible, in order to maintain canopy cover and connectivity.

Given that WRP are known to occur along the cycle path, the Shire will engage a fauna specialist to inspect the clearing area prior to and for the duration of clearing for the presence of WRP. Any individuals observed will be removed and relocated by a western ringtail possum specialist to a suitable habitat. There are no trees containing dreys that are planned for removal.

As mentioned above, the Shire has planned a revegetation project along this section of cycle path in winter 2022 involving the planting of 360 local native species, which will help to enhance the fauna habitat values along the path into the future.

CONCLUSION AND MANAGEMENT RECOMMENDATIONS

The clearing of 0.3 ha of vegetation along the Wallcliffe Cycle path to allow for reconstruction and widening of the path is not considered to be at variance with the 10 clearing principles.

The Shire of Augusta Margaret River will implement the following measures to ensure that impacts of clearing native vegetation are minimised.

- The design of the alignment took into account the location of trees and intact native vegetation in order to minimise vegetation clearing, and follows already cleared or degraded areas where possible. For the most part, the current path includes an adjacent maintenance strip, and the project design involves widening within this disturbed area where possible.
- There will be no removal of larger or mature trees that are 50cm DBH or higher.
- Construction of the path will be undertaken in a sensitive manner in order to minimise disturbance to vegetation, including the use of smaller machinery to undertake earthworks, and hand-trenching adjacent to trees in order to avoid damage to roots.
- Where removal of grass trees and sedges cannot be avoided, plants will be relocated to a suitable location within the project area.

- The Shire will implement a revegetation project in winter 2022, involving the planting of 360 local native species, in order to enhance flora and fauna values along the cycle path.
- A fauna specialist will inspect the clearing area prior to and for the duration of clearing for the presence of WRP. Any individuals observed will be removed and relocated by a western ringtail possum specialist to a suitable habitat, in accordance with DBCA's *Procedures to minimise the risk to western ringtail possums during vegetation clearing and building demolition*.
- Clearing activities will be undertaken in a slow, progressive manner in a single direction to allow fauna to move into adjacent native vegetation ahead of the clearing activity.
- Existing surface drainage patterns will be maintained during road reconstruction, with no changes to surface hydrology or movement of sediment into the surrounding environment.
- A Bed and Banks Permit will be sought from Department of Water and Environmental Regulation for any work proposed to the culverts along the western drainage line.
- Best practice weed and dieback hygiene measures will be implemented during clearing and construction (clean vehicles and machinery prior to entering the site).

COMMENTS ON THE PROPOSED CLEARING AGAINST THE CLEARING PRINCIPLES

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

It is not anticipated that the proposed clearing of up to 0.3 ha of native vegetation will have a significant impact on vegetation that is of a high level of biodiversity.

The vegetation along the 1.27 km path alignment is a mix of good to very good condition native remnant Jarrah-Marri forest and Low Peppermint forest with degraded pockets. The existing location of the cycle path is highly modified and for the most part includes an adjoining degraded maintenance strip. A number of large, mature trees occur along the pathway, however these will not be removed. Smaller juvenile marri and peppermint trees have re established in some sections along the path edge, and may need removal, however this is likely to be minor.

Grass trees and sedges that need removal will be relocated to other suitable areas within the project area, and the Shire will implement a revegetation program to enhance flora and fauna values along the cycle path.

There are no known occurrences of Threatened or Priority species or ecological communities in the project area or in proximity to the project area that will be affected by the clearing.

Principle (b) – Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia

It is not expected that there will be impacts to significant fauna or fauna habitat. The project area is known to contain habitat for Western Ringtail Possum, based on the Litoria (2020) survey. Potential impacts will be mitigated by designing the path reconstruction to avoid removal of trees and intact vegetation, retaining large, mature trees that are 50cm DBH or above, maintaining canopy cover and connectivity across the cycle path, and undertaking pre-clearing inspections of trees by a fauna specialist for WRP.

Given that large, mature trees that potentially provide nesting habitat for black cockatoo species will be retained and protected along the cycle path, it is not expected that there will be any significant impacts to black cockatoo species or their habitat.

The proposed mitigation measures will help to protect other native fauna, including species of significance such as quenda and brush-tailed phascogale, and brush-tail possum.

Revegetation proposed for the site in winter 2022 will assist in enhancing the fauna habitat values of the site into the future.

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

There are no known occurrences of Rare or Priority flora within the project area, or within the local vicinity of this section of the Wallcliffe cycle path.

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.

There are no known Threatened or Priority Ecological Communities, or their buffer zones, within this section of the Wallcliffe cycle path, or within the local vicinity.

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.

The native vegetation along this section of Wallcliffe cycle path is unlikely to be significant as remnant native vegetation. The vegetation falls in the Cowaramup (C1), and Wilyabrup (W1 & W2) vegetation complexes, which are all well represented in the south west region with over 30% of pre-European extent remaining.

The project area is located in just outside the Margaret River town centre, and within the rural residential zone, which has been moderately developed for housing, but has considerable native vegetation remaining. Intact contiguous vegetation contained in national parks occur 2 km to the west and north-east. The vegetation along the cycle path provides some habitat connectivity, however the very small scale of clearing and retention of large habitat trees means that there will be negligible impacts to vegetation connectivity, at both the local and regional scales.

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

The vegetation along Wallcliffe cycle path is not growing in or in association with a watercourse or wetland. At its western extent, the path crosses a tributary of the Margaret River, which is a proclaimed surface water area. Should any work be required to replace the existing culvers at this site, the Shire will seek a Bed and Banks permit from the Department of Water and Environmental Regulation.

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

The proposed clearing is not likely to cause appreciable land degradation. The path reconstruction and widening will be designed to maintain existing surface water patterns and to reduce the occurrence of erosion or runoff of sediment into the environment.

Principle (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.

There are no conservation reserves in close proximity to the proposed clearing area. The closest conservation reserves are Leeuwin Naturaliste National Park, approximately 2 km to the west, and Woodiup National Park, approximately 2 km to the north-east; neither of which will not be impacted by the proposed clearing.

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.

The proposed clearing is not likely to cause deterioration in the quality of surface or underground water. The path reconstruction has been designed to maintain existing surface water flows, with no runoff of water or sediment into the surrounding environment. Underground water will not be intercepted.

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

The proposed clearing is not likely to cause, or exacerbate, the incidence of flooding.

REFERENCES

Government of Western Australia. (2019). *2018 South West Vegetation Complex Statistics*. Current as of March 2019.

Litoria Ecoservices (2020). Western Ringtail Possum Habitat Assessment and Survey. Wallcliffe Rd Bike path, Margaret River. Unpublished report prepared for the Shire of Augusta Margaret River.

ATTACHMENT 1: LIST OF PHOTOS AND DESCRIPTIONS

Photo #	Tree #	Species	Size (cm DBH)	Comment
Path1				Photo of path, looking west.
Pathb				Maintenance strip on side of path, Wallcliffe Road in background.
Pathd				Cracks in path
Pathm				Photo of path, looking east
Culvert				Photo of pedestrian bridge over culvert. The bridge is not being upgraded or replaced.
Tree 9 Tree 9b	19	Marri	0.15	Potential removal.
Tree 10 Tree 10b	20	Marri	0.15	Potential removal.
Tree 12 Tree 12b	168	Peppermint	0.1	Growing in/on fence. Potential removal.
Tree 15 Tree 15c Tree 15e Tree 15f Tree 15g Tree 15h Tree 15i Tree 15j	190	Marri	0.5	Canker. Very poor condition. Potential removal.
	239	Marri	0.3	Potential removal.
Tree 25 Tree 25c	271	Peppermint	0.1	Potential removal.
Tree 289a Tree 289b	289	Peppermint	0.3	In culvert. Potential removal.
Tree 290a Tree 290b	290	Peppermint	0.1	In culvert. Potential removal.
Tree 291a Tree 291b	291	Peppermint	0.1	In culvert. Potential removal.
Tree 293a Tree 293b	293	Peppermint	0.1	In culvert. Potential removal.
Tree 294a Tree 294b	294	Peppermint	0.2	In culvert. Potential removal.
Tree 27b Tree 27c	297	Marri	0.1	Dead. Potential removal.
Tree 26 Tree 26b Tree 26c	305	Marri	0.15	Multistem. Potential removal.