

Attachment 1: Desktop assessment and site inspection, Rosa Glen Road upgrade



File reference: RDS/0044

Background

It is proposed to widen a 1.2km section of Rosa Brook Road, as shown in the accompanying maps. The road is currently 3 to 4 metres wide, which is insufficient for two vehicles to pass safely. It is proposed to widen the sealed road to 6.5 metres, with 1 metre unsealed edges on either side, and associated drainage works.

It is proposed to remove a total of 16 roadside native trees, and 120m² (0.012 ha) of native understorey as part of the road widening works.

A desktop assessment, followed by multiple site inspections by environment and landcare officers, have been undertaken of the road reserve. The vegetation in the road reserve is in degraded to completely degraded condition, with some sections comprising a narrow band of parkland cleared trees of both native and introduced species on either side of the existing road. In most sections of the road reserve there is a loss of native understorey, and weeds are dominant throughout the site. Roadside trees predominantly comprise stands of introduced species including pines, Tasmanian bluegums, Swamp Mahogany and other non-local *Eucalyptus* species interspersed with isolated marri (*Corymbia calophylla*) and jarrah (*Eucalyptus marginata*), with a small number of WA peppermint trees (*Agonis flexuosa*). Photographs taken along the alignment are included as a shapefile, and a list of photos and descriptions are included at Attachment 2.

Road widening works will result in the removal of a number of roadside trees, most of which are introduced species. Sixteen native trees are proposed for removal where they occur within the road widening footprint and cannot be avoided. These are predominantly marri trees (14), with a small number of peppermint trees (2). Two of the marri trees to be removed are large (Trees 1 and 13), but the crowns do not indicate potential breeding habitat for black cockatoos, due to the absence of branches large enough to contain significant hollows (photos 8898, 8900, 8901 and 8872).

Native understorey is limited to a very small section of the road alignment, and two small areas containing native understorey vegetation and small/juvenile peppermint trees and tea trees will be cleared, with a total clearing area of 120m² (0.012 ha).

Measures will be taken to avoid the removal of native trees wherever possible. The road widening has been designed to avoid a number of large marri trees, with eight roadside trees avoided through the road design process, or through undertaking retrenchment pruning to maintain a high level of road safety.

A total of 20 individual introduced trees, and a number of small stands of juvenile introduced trees will be removed from the roadside as part of the road widening works, comprising pine trees and introduced *Eucalyptus* species. Weeds are dominant throughout the road alignment,

and there is very limited native understorey. Measures will be taken to avoid the removal of native trees wherever possible.

The road reserve falls in the Treeton (T) and Blackwood (BK) vegetation complexes, which are well represented with 46.67% and 92.70% of the pre European extents remaining respectively. Freehold land adjoins both sides of the road reserve, which has been cleared for farming and viticulture. The road runs parallel to the Upper Chapman Brook, but is separated from the waterway by cleared land to the west. Vegetation in the road reserve provides minimal linkages to existing areas of remnant vegetation in the region. At the regional scale, extensive areas of native vegetation within Unallocated Crown Land (UCL) and National Park occur to the west, and east of the road reserve, however there are no linkages between these areas and the roadside vegetation on this section of Rosa Glen Road.

There are no known occurrences of threatened flora, fauna or threatened ecological communities within the road reserve. Two known occurrences of the western mud minnow (*Galaxiella munda*), listed as Vulnerable under the *Biodiversity Conservation Act 2016*, occur more than 200 metres to the west of the road reserve within the Chapman Brook.

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 will have an impact on vegetation that is of a high level of biodiversity. The roadside vegetation is in degraded to completely degraded condition, with stands of trees occurring along the roadside in a narrow corridor, dominated by introduced species including pines, Tasmanian bluegums, Swamp Mahogany and other non-local Eucalyptus species interspersed with isolated marri (*Corymbia calophylla*) and jarrah (*Eucalyptus marginata*), with a small number of WA peppermint trees (*Agonis flexuosa*). The roadside is otherwise parkland cleared, and dominated by weeds and pasture species. Native understorey is limited to a small section, and a total of 0.012 ha of native understorey will be cleared.

The road reserve falls in the Treeton (T) and Blackwood (BK) vegetation complexes, which are well represented with 46.67% and 92.70% of the pre European extents remaining respectively. There are no known occurrences of threatened flora, fauna or threatened ecological communities in the road reserve.

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

There are no known occurrences of threatened fauna within the road reserve. Two known occurrences of the Vulnerable western mud minnow (*Galaxiella munda*) occur in the Chapman Brook approximately 200 metres to the west, however road is separated from this watercourse by cleared freehold land, and widening works will not have an impact on this area.

Roadside trees have the potential to provide habitat for native fauna. Stands of jarrah and marri and a number of introduced pine and eucalypt species occur in narrow bands along the road. However given the degraded nature of the vegetation, and its lack of connectivity with extensive areas of remnant vegetation to the west and east, it is unlikely that the road reserve provides significant habitat for native fauna

A small stand of peppermint trees occurs within the alignment. While threatened species such as western ringtail possums may feed on the leaves of these trees, the area has been assessed with no evidence of scats or dreys present. Given the largely parkland cleared nature of the site, scats would have been easily spotted if western ringtail possums were utilising the site. As such, no night time surveys have been undertaken.

A number of the species including marri, jarrah and the introduced eucalyptus can provide foraging, roosting and nesting habitat for Black Cockatoo species. No trees with hollows or potential hollows have been noted.

The removal of a portion of the vegetation within the road reserve is not considered to have potential for significant impact on Black Cockatoo foraging given the presence of very extensive tracts of native vegetation in Unallocated Crown Land less than 2km to the west and National park 2km to the east. The Shire will implement measures to minimise the removal of trees. Road widening has been designed to avoid clearing a number of large marri trees, and retrenchment pruning of trees with overhanging branches will be undertaken as an alternative to tree removal.

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 flora within the road reserve, or within the local vicinity of the road reserve.

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 priority or threatened ecological communities within the road reserve, or within the local vicinity of the road reserve.

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 in the road reserve is unlikely to be significant as a remnant of native vegetation. The vegetation that is remaining is in degraded to completely degraded condition, with parkland cleared trees and weeds throughout the reserve. The road reserve falls in the Treeton (T) and Blackwood (BK) vegetation complexes, which are well represented with 46.67% and 92.70% of the pre European extents remaining respectively. Extensive vegetation exists as National Park and UCL to the west and east of the site.

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 section of the Rosa Glen road reserve is not associated a watercourse or wetland. The Chapman Brook runs adjacent to the road to the west, and is separated by cleared agricultural or viticultural land. The road reserve varies in distance from the Chapman Brook watercourse from 70m to over 300m. Drainage will be managed to ensure there is no erosion or runoff of sediment into the Chapman Brook.

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 unlikely to cause appreciable land degradation. The road widening and associated drainage will be designed to ensure there is no 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

While there are significant conservation reserves in close proximity to the proposed road upgrade (Blackwood River National Park) they will not be affected this project.

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 road widening and associated drainage will be designed to ensure there is no erosion or runoff of sediment into the environment. Underground water is unlikely to 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. The road widening and associated drainage will be designed to ensure that there is no flooding of water within the road reserve or surrounding environment.

Conclusion and management recommendations

The proposed clearing of native vegetation within the Rosa Glen road reserve to allow for road widening and drainage works 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 are minimised wherever possible.

- Clearing of native vegetation will be minimised wherever possible. This will be achieved by clearing in already disturbed areas, and designing the road upgrade to avoid a number of large marri trees. Retrenchment pruning of large branches will be undertaken as an alternative to tree removal where branches pose a safety hazard.
- Drainage will be designed and managed to ensure that there is no erosion and runoff of sediment to the Upper Chapman Brook.
- Dieback and weed control measures will be implemented during operations.

Attachment 2 – List of photos and descriptions

(Individual trees to be removed are in bold)

Photo # (in shapefile)	Description
8895, 8896	Tree 1 – large Marri, >50cm DBH
8897, 8899	Tree 1 , showing damage to main stem and branches from truck movement along existing road
8898, 8900, 8901	Tree 1 , crown does not indicate branches are of adequate size to support hollows suitable for black cockatoo nesting
8842	Two large marri trees (~40cm and 50cm DBH) to be retained
8843, 8844, 8845	Introduced Eucalypts to be removed
8846	Tree 2 – Marri, <30cm DBH
8848	Tree 3 – Marri, 2 stem, ~30cm and 20cm DBH
8849	Tree 4 – Marri, 2 stem, ~20cm and 20cm DBH
8852	Tree 5 – Marri, 40cm DBH, damaged and a safety hazard for adjoining property)
8853, 8855	Northern clearing area, comprising some native understorey and small/juvenile peppermint trees
8856	Trees 6 and 7 – Peppermint trees, multiple stems, 10cm – 30cm DBH
8857	Southern clearing area, comprising some native understorey and small/juvenile peppermint trees and tea trees.
8858	Tree 8 – Marri, ~30cm DBH
8860	Tree 9 – Marri, previously fallen and re-sprouted, 10cm DBH
8862, 8863, 8864	Stand of introduced Eucalypts to be removed
8866	Tree 10 – Marri, ~30cm DBH
8868	Introduced Eucalypts to be removed.
8870	Tree 11 – Marri, 2 stem, ~10cm and 20cm DBH
	Tree 12 – Marri, ~20cm DBH, no image available
8872	Tree 13 – large Marri, >50cm DBH, crown does not indicate branches are of adequate size to support hollows suitable for black cockatoo nesting.
8874	Introduced Eucalypts to be removed
8876	Large Marri tree to be retained, 2 stems, 40cm and 40cm DBH
8877	Stand of introduced Eucalypts to be pruned as required
	Tree 14 – Marri, ~20cm DBH, no image available
8878	Tree 15 – Marri, 2 stems, ~10cm and 20cm DBH, damaged. Tree 16 – Marri, ~10cm DBH
8881, 8887	Introduced pine trees to be removed or pruned as required
8886	Introduced Eucalypts to be removed
8891	Marri tree to be retained
8892	Large Marri tree to be retained, ~40cm DBH
8894	Small introduced Eucalypts to be removed