



## Biodiversity – Flora and Fauna

The Environment Effects Statement (EES) for Yan Yean Road Upgrade – Stage 2 examines the potential environmental, social, cultural and economic impacts of the Project and identifies how they will be avoided, mitigated or managed.

To inform the EES for the Project, we completed a series of technical investigations. We engaged ecologists

and arborists to identify the vegetation (flora) and wildlife (fauna) communities in and around the Project area.

These independent environmental experts conducted field surveys, searched state and federal databases, and completed desktop modelling and assessments. They then assessed the potential impacts the Project could have on the environment and helped develop suitable strategies to avoid, minimise or manage identified impacts.

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We're upgrading  
Yan Yean Road to  
help you get home  
safer and sooner.

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**To find out more**  
[roadprojects.vic.gov.au/ees](https://roadprojects.vic.gov.au/ees)

Authorised by the Victorian Government, 1 Treasury Place, Melbourne



## Vegetation – Flora

Approximately 20% of the Project area supports native vegetation patches. The environmental specialists recorded seven Ecological Vegetation Classes (EVCs) in the Project area. EVCs are classifications of vegetation communities in Victoria.

Most of the vegetation in the Project area is in poor to moderate condition but we identified some areas with a higher biodiversity value.

These areas include:

- two River Red Gum trees on the corner of Doctors Gully Road and Yan Yean Road
- native vegetation in and around Werther Park
- a Studley Park Gum and two Matted Flax-lily plants next to Yarrambat Park
- native vegetation between Ashley Road and Vista Court
- native vegetation between Laurie Street and Bannons Lane.

We identified approximately 7,000 trees in or close to the Project area. Native remnant trees, which have the highest environmental value, accounted for almost 3,500 of these.

The others include planted native trees, non-native trees and exotic tree species. Not all of these trees will be impacted by the Project, but they are located in the Project area.

To complete the project, we'll need to remove up to 4,777 trees. To offset the loss of native trees, we'll pay to permanently protect areas of native vegetation in other parts of Victoria and implement a Landscape Strategy to replant as many trees as possible within the Yan Yean Road project area.

The environmental specialists also found 118 native flora species in or near the Project area, including some rare, threatened and protected flora species.

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➔ The full list of rare, threatened and protected flora species and communities that we found are shown in the below table.

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Flora species or community	Location found	Classification
Matted Flax-lily	Between Bannons Lane and Laurie Street	Listed as endangered under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)  Listed as threatened under the <i>Flora and Fauna Guarantee Act 1988</i> (FFG Act)
Studley Park Gum	Between Bannons Lane and Laurie Street	Listed as endangered on the Victorian Threatened Species Advisory List
Pale-flower Crane's-bill	On private land near Werther Park	Listed as rare on the Victorian Threatened Species Advisory List
Western (Basalt) Plains Grassy Woodland	Several small, fragmented patches in the northern half of the project area	Listed as a threatened ecological community under the FFG Act

# Wildlife – Fauna

Our environmental specialists recorded a total of 88 fauna species in the Project area, 10 of which were introduced species. Introduced species like the European Rabbit and Red Fox were seen in high numbers during surveys.

Habitat suitable for threatened fauna species was recorded. This included hollow-bearing trees, patches of vegetation and scattered native vegetation.

It's unlikely the habitat in the Project area is used for breeding or as the primary foraging habitat for threatened fauna species.

The environmental specialists concluded the Project is unlikely to have a significant impact on any threatened fauna species.

When the road is widened, it could make it more difficult for arboreal marsupials, such as possums and gliders, to move between tree canopies either side of Yan Yean Road.

Measures will be put in place during construction to minimise potential impacts on all fauna, including threatened and common fauna.

Potential measures include:

- fauna sensitive fencing
- fauna bridges for arboreal mammals
- fauna sensitive lighting
- hollow bearing logs and nest boxes to provide habitat for wildlife
- signage to alert drivers to the presence of wildlife in the area.

Threatened fauna species with a low to moderate likelihood of being found in the Project area include:

Fauna species	Classification
Grey-headed Flying-Fox	Listed as vulnerable under the EPBC Act
	Listed as threatened under the FFG Act
	Listed as vulnerable on the Victorian Threatened Species Advisory List
Swift Parrot	Listed as endangered under the EPBC Act
	Listed as threatened under the FFG Act
	Listed as endangered on the Victorian Threatened Species Advisory List
White-throated Needletail	Listed as migratory under the EPBC Act
	Listed as vulnerable on the Victorian Threatened Species Advisory List
Rufous Fantail	Listed as migratory under the EPBC Act
Brush-tailed Phascogale	Listed as threatened under the FFG Act
	Listed as vulnerable on the Victorian Threatened Species Advisory List
Common Bent-wing Bat	Listed as threatened under the FFG Act
Tussock Skink	Listed as vulnerable on the Victorian Threatened Species Advisory List

Common native wildlife in the project area include:



**Eastern Grey Kangaroo**



**Common Wombat**



**Common Ringtail Possum**



**Common Brushtail Possum**



**Common native frogs and reptiles**



**Sugar Glider**



**Echidna**



## Minimising the impact

### We adopted an 'avoid and minimise' principle during the design process to reduce the Project's impact on local biodiversity.

While we're unable to completely avoid native vegetation, and the habitat it provides for wildlife, we are able to reduce the Project's impact.

The Project has been designed to have as low of an impact as possible on the environment, while still achieving road safety objectives. Some of the ways we can achieve this are by:

- keeping the footprint of the Project design as small as possible. We did this by narrowing the width of the median, introducing retaining walls at some locations and using steeper batter slopes in others
- investigating 13 design options to upgrade the Bridge Inn Road intersection that sought to avoid and minimise impacts to the River Red Gum trees on the corner of Doctors Gully Road and Yan Yean Road, and progressing with a preferred design that avoids removing these two trees
- identifying approximately 130 areas where No-Go Zones (NGZs) will be established to protect native vegetation to be retained during construction.

There are other things we'll do while we're upgrading Yan Yean Road to further minimise the Project's impact on local flora and fauna, including:


- relocating some Matted Flax-lily plants if we find they'll be impacted by construction. Matted Flax-lily plants cope well with being moved and replanted
- collecting seeds from the Studley Park Gum. We'll try to grow the seeds so we can replant them back into the local area during landscaping works. We may also donate some of the seeds to the Victorian Conservation Seedbank
- implementing the Swift Parrot Management Plan that we developed for the Project. The management plan makes sure that potential impacts on Swift Parrots during construction are minimised
- installing fauna sensitive fencing at some locations to assist the Swift Parrot and other flying wildlife to recognise new fencing and avoid collisions. This includes specific design considerations for the high safety fence we're proposing to install between Yarrambat Park Golf Course and Yan Yean Road
- improving movement opportunities for wildlife. We'll install fauna bridges for arboreal mammals, fauna sensitive lighting and signage to alert drivers to the presence of wildlife in the area, especially the large number of Eastern Grey Kangaroos
- enhancing the roadside vegetation through implementing the Project's Landscape Strategy
- including environmental management requirements into the Construction Environmental Management Plan (CEMP) that the contractor delivering the project will abide by.

In total, over 5,100 trees could be impacted by the Project. This figure includes native and exotic species, and trees that we'll aim to retain but their root system may be impacted by the new road.

To continue to reduce the Project's impact on trees, we'll:

- develop a Tree Protection Management Plan (TPMP) that outlines how trees will be protected during construction, including the two River Red Gum trees near the Bridge Inn Road intersection
- establish No-Go Zones (NGZ) around trees to be retained and protected. The contractor cannot enter an NGZ without our permission. Additional NGZs may be identified and implemented as part of the ongoing design and construction management process
- further refine the design in the lead up to, and during, construction to avoid and minimise impacts to the surrounding environment and retain additional trees wherever possible
- optimise the design of the safety barriers to retain trees and avoid trenching to install them
- realign and vary the width of the walking and cycling paths to minimise encroachment on tree root systems
- install traffic lights, utility services and conduits with directional drilling, boring or non-destructive digging techniques when close to trees.

*Image above: courtesy Andrew Silcocks of Birdlife Australia.*



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## Our commitment

We understand and share the value the community places on the local environment. We're committed to preserving the natural environment and protecting wildlife while we deliver this important and much needed road upgrade.

We've developed an Environmental Management Framework (EMF) that provides a transparent and integrated framework for managing the Project's environmental impact.

The EMF establishes Environmental Performance Requirements (EPRs) that set the environmental outcomes that must be achieved during design, construction and operation of the new road.

EPRs have been developed to address the Project's identified impacts and to deliver environmental benefits.

You can view this as part of the EES documentation available for the Project.

We commit to continually re-evaluating and refining the road design and construction methodology with the goal to avoid and minimise impacts on native vegetation and wildlife as much as possible.

## EES Documentation

The EES, including the Biodiversity Existing Conditions Assessment, Biodiversity Impact Assessment and Arboriculture Assessment, is available to view and on display for public comment from 31 August to 9 October 2020.

Commenting on the EES gives you a chance to have your views considered as part of the planning approvals decisions for Yan Yean Road Upgrade – Stage 2. You can read the EES on our website. Copies are also available on USB by request.

### More information

For more information about the EES process, where to read the document and how to make a submission visit [roadprojects.vic.gov.au/yyr-ees](https://roadprojects.vic.gov.au/yyr-ees).

For more information about the project, email [contact@roadprojects.vic.gov.au](mailto:contact@roadprojects.vic.gov.au) or call 1800 105 105.

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## Contact us

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