



# Environment, habitat and biodiversity

Yarra Ranges Council has commenced a comprehensive and transparent planning, consultation and assessment process for the Warburton Mountain Bike Destination through an Environment Effects Statement (EES).

The Warburton Mountain Bike Destination is set in a unique and sensitive environment which is highly valued for its biodiversity and beauty. Protecting the area's natural and cultural environment and minimising potential impacts is central to the project's development.

The EES for the Warburton Mountain Bike Destination will assess the project's environmental effects in four key areas.

The EES will assess the project's effects on biodiversity and ecological values within and near the site including native vegetation; ecological communities and species listed under the *Flora and Fauna Guarantee Act 1988* (FFG Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

## Environmental investigations already undertaken

The Warburton Mountain Bike Destination has been in development since it was first raised in 2010 by local riders. A feasibility study and desk top Flora and Fauna Assessment were completed in 2013 with support of Parks Victoria under the *Healthy Parks Healthy People* program.

Over several years and stages of investigations and design, Council has undertaken a feasibility study, detailed planning work, extensive technical investigations and community consultation to inform the project's design and Master Plan.

The following environmental studies and technical investigations have been prepared since 2013 to

help guide the project's development and have been publicly available for consultation. Findings from these past studies will be considered by technical specialists preparing the biodiversity and habitat assessment for the EES, along with further research, consultation and field investigations.

- Environmental risk assessment
- Survey of the Mount Donna Buang Wingless Stonefly
- Biodiversity impact assessment (draft)
- Endorsed ecological protocols
- Bushfire management statement and plan (draft)
- Construction Environment Management Plan (draft)
- Operations, weed and maintenance plan (draft)
- Hydrogeological assessment
- Geotechnical risk assessment
- Surface water assessment

Further work is now being undertaken to inform the project's EES.



## Community and stakeholder perspectives

The project is being developed in partnership with Parks Victoria and the Department of Environment, Land, Water and Planning and with input from the Wurundjeri Woi Wurrung, Melbourne Water and the Upper Yarra Community Enterprise.

Since 2016, each of these organisations and other key stakeholders have provided direct input to the project's development, identified sensitive areas through a step-by-step design process and advised on field studies and other technical investigations.

Community feedback gathered through consultation in 2013, 2016 and 2018 has also tapped into extensive local knowledge and helped the project team understand areas of importance and the community's strong focus on protecting native flora and fauna.

## Environmental values in and around Warburton

The mountains around Warburton are home to beautiful native forests and Yarra Ranges National Park. Featuring significant vegetation communities such as Cool Temperate Rainforest, the area provides important habitat for native fauna.

The trail network is proposed to be located within the Victorian Alps Bioregion and the Highlands Southern-fall Bioregion.

Work to date has identified seven ecological vegetation classes (EVCs) and 190 plant species including 171 indigenous species in the project area. This includes three Victorian-threatened flora species but no EPBC Act-listed flora species.

A range of threatened fauna species may be found in the proposed project area.

Some native vegetation would need to be removed to build the trails. Trail alignments have been designed to avoid older trees with hollows, which are likely to provide habitat for native animals including Leadbeater's Possum, Greater Glider and forest owls.

Based on the current design and studies to date, large trees are not expected to be removed during construction. Ground cover and small vegetation usually regrows quickly to the edge of trail boundaries following construction.

Further fieldwork is progressing to inform the EES, which will include a detailed assessment of potential impacts on flora and fauna and determine offset requirements for native vegetation removed.

### THE PATH OF THE WINGLESS STONEFLY

Listed as threatened under the FFG Act, the Mount Donna Buang Wingless Stonefly (*Riekoperla darlingtoni*) is unique in Victoria and one of only two species found in Australia.

This species is specifically found within a 1km radius of the Mount Donna Buang summit. Its suitable habitat includes springs and trickles found down to 900m above sea level within Yarra Ranges National Park.

A leading ecologist who specialises in the study of native insects, including the Wingless Stonefly, has walked potential trail alignments and provided advice to the project team on specific behaviours and habitat.

While the project is not expected to impact on Wingless Stonefly populations, further assessment is underway for the project's EES.

## Sensitive design development

Minimising impacts and ensuring long-term sustainability are central to designing and implementing a successful mountain bike trail network.

This begins in the design phase - by ensuring trails avoid critical environmental values and sites of cultural heritage significance wherever possible - and continues in the construction phase through careful and sensible design refinements and construction practices.

Early in the design process the project team developed environmental risk controls, with advice from key species experts in Cool Temperate Rainforest, Leadbeater's Possum and the Wingless Stonefly.

The risk controls include standards to be met by the design and during construction, such as exclusion zones around nest boxes, hand construction only within 10m of a Myrtle Beech Tree and requirements for waterway crossings.

Further measures to monitor and control potential impacts on ecological values are likely to arise from technical assessments being undertaken for the EES.

The *Trails Design and Operation fact sheet* provides more detail about design development.

## The special value of Cool Temperate Rainforest

The proposed trails to the north of Warburton on Mount Donna Buang run through steep mountain terrain featuring mixed forest with tall eucalypts. This gives way to areas of Cool Temperate Rainforest to the north and south of Mount Donna Buang Road.

This type of rainforest only occurs in highland areas with higher rainfall and fertile soils.

Rainforest and related vegetation are highly sensitive to disturbance such as fire, disease and other threatening processes and Cool Temperate Rainforest is listed as threatened under the FFG Act, so protection of the forest on Mount Donna Buang has been a starting point for the design of trails.

Designing mountain bike trails includes multiple stages – conceptual design, master planning, detailed design and pre-construction assessments.

During the master planning stage, the concept design for trails on Mount Donna Buang was assessed through ground-truthing, where environmental and other technical specialists walk the proposed alignment to assess first-hand whether impacts can be avoided or minimised.

This ground-truthing identified inaccuracies in vegetation mapping and Cool Temperate Rainforest was discovered.

This led to significant design revisions to keep the trail out of the rainforest areas as much as possible.

This process of revision identified approximately 2.5km of the trail would need to stay within Cool Temperate Rainforest as it could not be moved into the adjacent water supply catchment.

To minimise impacts to the rainforest flora, raised boardwalks and sensitive construction techniques would be used where the trail passes through these sections.

Further assessment of potential impacts on Cool Temperate Rainforest is being undertaken including investigation of alternative alignments and further opportunities to avoid or minimise impacts.

## PROTECTING THE LEADBEATER'S POSSUM

Leadbeater's Possum (*Gymnobelideus leadbeateri*) is a critically endangered species under the EPBC Act and listed under the FFG Act.

There is known habitat for Leadbeater's Possum within the project area that has the potential to be impacted.

The conservation and protection of Leadbeater's Possums is critical for this project and a fundamental consideration in the preparation of environmental controls and evolution of the design.

Trail alignments have been designed to minimise impacts to trees. Large old trees which may provide critical habitat are not expected to be removed during construction.

The proposed trail alignment avoids all Australian National University Leadbeater's Possum monitoring plots. Of the 23 nest box locations, only two occur close to the trail alignment.

Further assessment of potential impacts on Leadbeater's Possum will be undertaken as part of technical studies and during the EES process. Additional mitigation measures may be adopted to assist in avoiding or minimising impacts to the Leadbeater's Possum habitat.





## EES assessment of effects on biodiversity and habitats

The EES Scoping Requirements set the following evaluation objective for assessment of biodiversity and habitat effects:

*Avoid, and where avoidance is not possible, minimise potential adverse effects on native vegetation and animals (particularly listed threatened species and their habitat and listed ecological communities), as well as address offset requirements consistent with state and Commonwealth policies.*

The study on the project's effects on biodiversity and habitat will be conducted by specialists in ecology and biodiversity using research, consultation with stakeholders and field investigations.


The EES will include assessment of potential effects on native vegetation including large old trees, ecological communities and fauna and flora species listed under relevant Commonwealth and State environmental protection legislation.

More information on the assessment requirements in relation to potential effects on biodiversity and habitats is available in the EES Scoping Requirements.

[www.planning.vic.gov.au/environment-assessment/browse-projects/projects/warburton-mountain-bike-destination](http://www.planning.vic.gov.au/environment-assessment/browse-projects/projects/warburton-mountain-bike-destination)

## Find out more and stay involved

**Community input is an important part of the EES process and the project's continued development.**

 Sign up for project updates, find the latest information or ask a question on our website [rideyarraranges.com.au](http://rideyarraranges.com.au)

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