

## **Environmental Effects Act 1978**

The *Environmental Effects Act 1978* (EE Act) is a Victorian legislation that provides for assessment of proposed projects (works) that can have a significant effect on the environment. Environment Effects Statement (EES) is a detailed record of the environmental impacts during construction delivery and operational phases of a project, as well as the mitigation risks and environmental performance requirements.

The Victorian Minister for Planning might typically require a proponent to prepare an EES when:

- there is a likelihood of regionally or State significant adverse effects on the environment
- there is a need for integrated assessment of potential environmental effects (including economic and social effects) of a project and relevant alternatives, and
- normal statutory processes would not provide a sufficiently comprehensive, integrated and transparent assessment

The *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978 (2006)* (Ministerial Guidelines) set out the process for an EES. The EES is not an approval document and at the end of the EES process, the Minister for Planning provides a recommendation to statutory decision-makers on the likely impacts of the project. This enables decision-makers to make co-ordinated and informed decisions as to whether the environmental impacts are acceptable. The Ministerial Guidelines contain referral criteria to guide proponents in assessing whether to refer a project to the Minister for Planning for a determination as to whether an EES is required.

These criteria consist of both individual criteria and combined criteria:

- Individual criteria comprise a category of potential environmental effects that may be of State or regional significance such that if any of the specified individual criteria are met, the project ought to be referred.
- Combined criteria comprise a category of potential environmental effects that may be of State or regional significance such that if two or more of the specified criteria are met, referral of the project is warranted.

### **Self-Assessment under the EE Act**

Each criterion has been assigned a likelihood of being triggered based on the information known to date:

- Likely: The Project has the potential to breach the thresholds identified by the criterion and it is unlikely that avoidance or mitigation / management measures will reduce impacts to an acceptable level.
- Unlikely: The Project is unlikely to breach the thresholds identified by the criterion and / or it is considered that the implementation of avoidance measures or mitigation / measures will adequately manage potential impacts.

Assessment of Potential Effects Against Individual Criteria

Criteria	Response/ Information Known to Date	Additional Assessment Required	Likelihood of Criteria Being Trigger
<p><b>Potential clearing of 10 ha or more of native vegetation from an area that:</b></p> <ul style="list-style-type: none"><li>■ <b>Is of an Ecological Vegetation Class identified as endangered by the Department of Sustainability and Environment (in accordance with Appendix 2 of Victoria’s Native Vegetation Management Framework); or</b></li><li>■ <b>Is, or is likely to be, of very high conservation significance (as defined in accordance with Appendix 3 of Victoria’s Native Vegetation Management Framework); and</b></li><li>■ <b>Is not authorised under an approved Forest Management Plan or Fire Protection Plan</b></li></ul>	<p>This criterion is not triggered as:</p> <ul style="list-style-type: none"><li>• While some of the proposed removal is within endangered or vulnerable EVCs, the total removal is less than 10 hectares (6.8 hectares).</li><li>• The project is not part of an approved forest management plan or fire protection plan in Victoria.</li></ul> <p>Biosis 2024</p>	<p>Pre-construction micro-siting to lessen impacts on-ground</p>	<p>Unlikely</p>
<p><b>Potential long-term loss of a significant proportion (e.g. 1 to 5 percent depending on the conservation status of the species) of known remaining habitat or population of a threatened species within Victoria.</b></p>	<p>This criterion is not triggered by the project.</p> <p>Key threatened <b>flora</b> species recorded in the assessment corridor:</p> <ul style="list-style-type: none"><li>• Ausfeld's Wattle <i>Acacia ausfeldii</i> (endangered under FFG Act)<ul style="list-style-type: none"><li>– Scattered throughout north-central Victoria, mostly restricted to the western Goldfields bioregion.</li></ul></li><li>• Umbrella Wattle <i>Acacia oswaldii</i> (critically endangered under FFG Act)<ul style="list-style-type: none"><li>– Widespread but uncommon.</li></ul></li><li>• Buloke <i>Allocasuarina luehmannii</i> (critically endangered under FFG Act)<ul style="list-style-type: none"><li>– Occurs across northern and north-western Victoria.</li></ul></li><li>• Pale Flax-lily <i>Dianella</i> sp. aff. <i>longifolia</i> (Riverina)<ul style="list-style-type: none"><li>– Modelled by DEECA as having ‘dispersed’ habitat</li></ul></li><li>• Late-flower Flax-lily <i>Dianella tarda</i> (critically endangered under FFG Act)<ul style="list-style-type: none"><li>– Widespread across north-eastern and north central Victoria.</li></ul></li><li>• Waterbush <i>Myoporum montanum</i> (endangered under FFG Act)<ul style="list-style-type: none"><li>– Scattered across northern Victoria where it is uncommon to rare.</li></ul></li><li>• Riverina Fireweed <i>Senecio longicollaris</i> (endangered under FFG Act)<ul style="list-style-type: none"><li>– Scattered on floodplains across northern and western Victoria.</li></ul></li></ul> <p>Of the species listed above only, none has a limited habitat distribution across Victoria. An additional 43 threatened flora are considered to have a medium or high likelihood of occurrence within the assessment corridor. Provided the recommendation for pre-construction micro-siting is implemented, it is reasonable to expect that all occurrences of threatened flora (if present within the impact footprint) will be able to be avoided. It is therefore considered unlikely that the removal of up to 6.8 hectares of habitat would constitute 1% of the known remaining habitat or population for any flora species. Key threatened <b>fauna</b> species recorded in the assessment corridor:</p> <ul style="list-style-type: none"><li>• Diamond Firetail (vulnerable under FFG Act)</li></ul>	<p>Pre-construction micro-siting</p>	<p>Unlikely</p>

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	<p>– Broad distribution throughout south-eastern Australia, from southern Queensland to south-eastern South Australia.</p> <p>Additionally, no threatened fauna considered likely to occur in the assessment corridor are likely to have restricted habitat distribution across Victoria. Provided the recommendation for pre-construction micro-siting is implemented, it is reasonable to expect that all occurrences of habitat values for threatened fauna will be able to be avoided.</p> <p>Biosis 2024</p>		
<b>Potential long-term change to the ecological character of a wetland listed under the Ramsar Convention or in ‘A Directory of Important Wetlands in Australia’.</b>	<p>Ramsar sites within or adjacent to the study area include Barmah Forest, Forest Gunbower and the NSW Central Murray State Forests. DIWA wetlands within the study area include Gunbower Island, Barmah-Millewa Forest and Lower Goulburn River. In the context of these Ramsar sites and DIWA wetlands and the habitats they provide, impacts from construction work are unlikely to impact on the ecological character of these wetlands (including ecosystem components, processes and services).</p> <p>Biosis 2024</p>	No	Unlikely
<b>Potential extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems, over the long term.</b>	<p>This criterion has low potential to be triggered. The crossing over Deep Creek will be a clear span elevated structure to avoid impacts on the beds and banks of the creek (freshwater aquatic habitats).</p> <p>The crossing over Muller Creek will be a culvert so will directly impact the beds and banks of that waterway however installation of the crossing will not result in any change to water availability, stream flow, waterway function or regional groundwater levels.</p> <p>Strict sediment control and trail design responses will be put in place to manage soil erosion and waterway sedimentation risks.</p> <p>Biosis 2024</p>	Construction Environmental Management Plans (CEMP) to ensure environmental compliance	Unlikely
<b>Potential extensive or major effects on the health, safety or well-being of a human community, due to emissions to air or water or chemical hazards or displacement of residences.</b>	<p>This criterion is not considered applicable due to the low impact nature of the project (i.e. trail construction).</p> <p>Biosis 2024</p>	No	Unlikely
<b>Potential greenhouse gas emissions exceeding 200,000 tonnes of carbon dioxide equivalent per annum, directly attributable to the operation of works.</b>	<p>This criterion is not considered applicable due to the low impact nature of the project (i.e. trail construction with small machinery).</p> <p>Operation of trail will require the employment of one dedicated ranger with vehicle. Additional contractor maintenance for grading and minor works.</p>	No	Unlikely

### Assessment of Potential Effects Against Combination Criteria

Criteria	Response/ Information Known to Date	Additional Assessment Required	Likelihood of Criteria Being Trigger
Potential clearing of 10 ha or more of native vegetation, unless authorised under an approved Forest Management Plan or Fire Protection Plan.	<p>This criterion is not triggered by the project.</p> <ul style="list-style-type: none"> <li>Vegetation removal in the narrow (2.5 metre wide) trail construction corridor is for understorey vegetation only and the canopy will be retained. There is 6.8 hectares (i.e. less than 10 hectares) proposed for removal.</li> </ul>	No	Unlikely

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<b>Matters listed under the <i>Flora and Fauna Guarantee Act 1988</i>:</b> <ul style="list-style-type: none"> <li>■ <b>potential loss of a significant area of a listed ecological community; or</b></li> <li>■ <b>potential loss of a genetically important population of an endangered or threatened species (listed or nominated for listing), including as a result of loss or fragmentation of habitats; or</b></li> <li>■ <b>potential loss of critical habitat; or</b></li> <li>■ <b>potential significant effects on habitat values of a wetland supporting migratory bird species.</b></li> </ul>	<p>This criterion is unlikely to be triggered as:</p> <ul style="list-style-type: none"> <li>• While vegetation to be removed provides habitat for a number of species that comprise the Victorian Temperate Woodland Bird Community, habitat for this community will not be significantly impacted by the removal of a narrow corridor of understorey vegetation considering the extent of removal in the context of similar habitat available in surrounding landscape.</li> <li>• No genetically important populations of flora occur within the assessment corridor. Recorded threatened species are not within genetically important populations.</li> <li>• Residual impacts on FFG Act listed species are likely to be localised and of low impact and not result in the loss of a genetically important population of an endangered or threatened species.</li> <li>• While Ramsar wetlands are present surrounding the proposed works, the works are highly unlikely to significantly affect the habitat values of these wetlands.</li> </ul> <p>Biosis 2024</p>	No	Unlikely
<b>Potential extensive or major effects on landscape values of regional importance, especially where recognized by a planning scheme overlay or within or adjoining land reserved under the <i>National Parks Act 1975</i>.</b>	<p>This criterion is unlikely to be triggered as:</p> <ul style="list-style-type: none"> <li>• The project occurs within the Barmah National Park and Gunbower National Park which are both reserved under the National Parks Act 1975. In the context of the existing informal use of much of the proposed alignment for walking, camping, and 4WDing, impacts are not considered extensive over the landscape which they occur in. The impacts are not considered to represent a major effect on landscape values of regional importance.</li> </ul> <p>Biosis 2024</p>	No	Unlikely
<b>Potential extensive or major effects on land stability, acid sulphate soils or highly erodible soils over the short or long term.</b>	<p>The new works proposed consist of repair of existing roads, new 1.5 wide trail, camping, canoe infrastructure and bridges.</p> <p>New trail. Positioned away from bank edges to reduce erosion. Minimal excavation undertaken to form pathway. Any excavated material will be used to form sides and fill depressions. Paths will be formed using a VicRoads CL2/3 and compacted to form a hard-wearing surface. Drainage will be implemented were required to not impede the flow of water. Trail occurs on areas with little elevation change causing water to move slower through the environment and reducing scouring. New trail works will have an insignificant impact on erosion. Acid sulphate soil environmental impact risk is low. Excavations only being required to remove topsoil and vegetation to a hard base. Excavation depths are targeted at &lt;100mm. CEMP will be required to address the work methodology is acid sulphate soils are encountered.</p> <p>Camping infrastructure Positioned 20m away from bank Areas being formalised currently allow dispersed camping. Infrastructure being implemented to improve amenity and reduce the sprawling nature of the sites. Disturbances are minor and would not increase the level of erosion in these areas. It would be hoped that the introduction of structure in these areas would</p>	<p>Continued improvement through final iterations of documentation and specifications.</p> <p>Creation/approval and implementation of a CEMP that addresses the EPA guidelines for erosion protection</p> <p>Implementation of an acid sulphate soil contingency plan for areas where High impact ground disturbing works are occurring and high risk of acid sulphate soils is identified by the CSIRO Atlas of Australian Acid Sulphate Soils</p>	Unlikely

	<p>assist the understory rejuvenation.</p> <p>Largest excavation (~10m<sup>3</sup>) is for the toilets. The spoil generated will be used to mound the toilet. The batters will then be protected through vegetation. CEMP will be required to address the work methodology is acid sulphate soils are encountered. Toilet locations are orientated to areas of higher elevation.</p> <p>Existing roads</p> <p>Parks Victoria's roads along the Murray are 4WD gazetted, unsealed and often in need of repair. The project aims to add planning approvals to allow for repair and maintenance. No widening or increase of service level will be undertaken. Repair of the roads will help reduce the level of erosion by controlling water, reducing braiding/alternate paths. The repair of existing roads would be considered an erosion reduction measure with minimal excavation undertaken.</p> <p>Canoe infrastructure (stepped)</p> <p>These structures will be installed into the banks. Excavation to embed footings into the bank will be undertaken. Both sides will be protected using larger rip-rap rock to armour the structure preventing erosion.</p> <p>An CEMP will be required to address sedimentation risks through construction. These are small structures and will have minimal effect on water flow. CEMP will be required to address the work methodology is acid sulphate soils are encountered.</p> <p>Bridges</p> <p>Two bridges are proposed along the trail. Both are pedestrian bridges with no in-water works. Having no impact on the flows of water.</p> <p>One suspension and one truss both will rely on footings founded on the banks. Rock armouring will be implemented at where interactions between flood waters and footings could occur. Structures will not have a impactful impediment of overland flow. Civil drainage infrastructure will be implemented to control water. An CEMP will be required to address sedimentation risks through construction. These structures will have minimal impact on erosion. CEMP will be required to address the work methodology is acid sulphate soils are encountered.</p>		
<b>Potential extensive or major effects on beneficial uses of waterbodies over the long term due to changes in water quality, streamflows or regional groundwater levels.</b>	<p>Due to the nature of the project, there would be insignificant impact on quality, streamflow's or regional groundwater levels.</p> <p>The project does not seek to impact the flow of any water courses. Drainage channels within the landscape will not be altered. Drainage for roads and pathways will follow the existing lay of the land.</p> <p>Groundwater will not be accessed as part of this project. Nor will any excavations expose groundwater.</p> <p>The projects scope is of civil infrastructure. No by-products or waste is created in an operational stage.</p>	No	Unlikely
<b>Potential extensive or major effects on social or economic well-being due to direct or indirect displacement of non-residential land use activities.</b>	<p>Impact to social and economic well being of area is expected to be positive. Increasing nature-based tourisms and improving the local economy are projected outcomes of the project.</p> <p>It is highly unlikely that because of this project any non-residential land use activities would be impacted.</p> <p>The impacts of the project will have an insignificant impact on this metric.</p>	No	Unlikely
<b>Potential for extensive displacement of residences or severance of residential access to community resources due to infrastructure development.</b>	<p>The project seeks to improve access within the Parks Victoria Estate along the alignment.</p>	No	Unlikely

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	<p>No impacts to property access will occur.</p> <p>Project will not displace any residences.</p> <p>Project will not impact access to any community resources</p> <p>The impacts of the project will have an insignificant impact on this metric.</p>		
<b>Potential significant effects on the amenity of a substantial number of residents, due to extensive or major, long-term changes in visual, noise and traffic conditions.</b>	<p>Permitted trail uses are cycling and walking. Low noise and minimal impact. Trail constructed is a 1.5m width natural, unsealed surface. No impact to sight lines will occur.</p> <p>For some residents a new trail constructed between their property boundary and the Murray River within public land. These areas are currently accessible by the public, but no formal pathway exists. This could be seen as a unwanted eyesore for residents, or a significant increase in traffic from the minimal visitors that are seen there.</p> <p>To explore this further Parks Victoria undertook a targeted engagement with all the direct neighbours to the proposed trail and discussed the use of public land that they bounded.</p> <p>Following this engagement and the discussions undertaken the impact to residents would not be classified as significant. Further engagement and discussions with residents are required to complete the engagement procedure. Final discussions cannot be undertaken until project is approved and funding is available for the section in question. Initial scope has minimal works near properties that neighbour the parks.</p>	Continue community engagement with near neighbours to communicate when works are scheduled for delivery.	Unlikely
<b>Potential exposure of a human community to severe or chronic health or safety hazards over the short or long term, due to emissions to air or water or noise or chemical hazards or associated transport.</b>	<p>Project will not expose users to severe or chronic health or safety hazards due to emissions to air or water or noise or chemical hazards or associated transport.</p> <p>Project has minimal ongoing operations once implemented with no direct emissions associated. Only emissions connected would be through associated land management tasks.</p> <p>The impacts of the project will have an insignificant impact on this metric.</p>	No	Unlikely
<b>Potential extensive or major effects on Aboriginal cultural heritage.</b>	<p>Parks Victoria operates under the Managing Country Together framework Managing Country Together Framework</p> <p>Project is undertaking five CHMP's across the project. To detail all impacts to quantify all impacts to tangible and intangible Cultural Heritage for the construction and operation outcomes of this project.</p> <p>These seek to identify Cultural Heritage and provide protections to re-discovered sites.</p> <p>The project is taking a harm minimisation approach with avoidance being preferred with protection following next.</p> <p>The RAP for the majority of the project YYNAC sits on the project steering committee and has been engaged with throughout the project</p> <p>Interested parties within the NON-RAP area have been engaged with.</p> <p>The works proposed will not have a extensive or major effect on Aboriginal Cultural Heritage. Engagement will be maintained throughout the implementation.</p>	<p>Continue CHMP's with the aim for avoidance and protection.</p> <p>Continued engagement with Traditional Owners with scope and delivery to allow for transparency and collaboration.</p>	Unlikely

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<b>Potential extensive or major effects on cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the <i>Heritage Act 1995</i>.</b>	<p>No new works are planned within Heritage overlays or impact items on the heritage register. Project works would be undertaken with a contingency plan as the areas in question have had ongoing historical uses.</p> <p>The project does pass through Heritage Overlays but utilises existing infrastructure and simply directs users.</p> <p>The impacts of the project will have an insignificant impact on this metric.</p>	Implementation on contingency plan	Unlikely
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