

Public Environment Report

Chapter 18

Conclusion

September 2019



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North East Link has been designed to support business and job growth in Melbourne's north, east and south-east, while also improving cross-city connectivity and helping to address critical traffic, freight and amenity issues.

Project objectives and guiding principles have established the broad strategic direction for the design and development of North East Link in line with the transport system objectives of Victoria's *Transport Integration Act 2010* (Vic) and the Victorian Government's long-term metropolitan planning strategy, *Plan Melbourne 2017–2050*.

As described in Chapter 4 – Feasible alternatives, multiple alternatives to the action were considered to address the transport challenges faced by Melbourne due to changes in population, economy and areas of urban growth. Following an assessment of strategic interventions and strategic options that were also considered alongside a 'do nothing' option, a connected freeway was selected as the preferred option.

Alternative corridors for North East Link progressed through an iterative options assessment, with the current option for the action selected as it performed significantly better than the alternatives against North East Link objectives and guiding principles.

North East Link would pass through Melbourne's north-eastern suburbs and include:

- Surface works along the M80 Ring Road (otherwise known as the Metropolitan Ring Road) east of Plenty Road and a new interchange linking the M80 Ring Road, Greensborough Bypass and North East Link
- Surface works to construct the proposed North East Link road south of the M80 Ring Road through to Yallambie and Macleod
- Works to place North East Link in a twin tunnel between Watsonia and Bulleen, with new interchanges at Lower Plenty Road and Manningham Road to link North East Link with the local area
- A new interchange connecting North East Link to the Eastern Freeway at Bulleen Road
- Widening of the Eastern Freeway largely within the road reserve from Chandler Highway to Springvale Road
- Construction of a new dedicated busway ('Doncaster Busway') from Doncaster Road to Hoddle Street
- Pedestrian and cycling connections with connected shared use paths from the M80 Ring Road to the Eastern Freeway.

North East Link is being assessed under relevant Australian and Victorian government legislation. This PER has been prepared in accordance with the requirements set out in the PER Guidelines issued by the Australian Government’s Department of the Environment and Energy (DoEE) for the action.

The following sections address how North East Link complies with the principles of ecologically sustainable development and the objects and requirements of the Australian Government’s *Environment Protection and Biodiversity Act 1999* (EPBC Act). Required offsets or other measures for any unavoidable impacts on Matters of National Environmental Significance (MNES) are also addressed.

18.1 Principles of ecologically sustainable development

The PER addresses matters affecting or likely to affect the environment on Commonwealth land and MNES as a result of North East Link. The Victorian assessment and approval process through an Environment Effects Statement (EES) addresses the other potential environmental impacts of North East Link.

North East Link has been developed in consideration of the five principles of ecological sustainable development listed under Chapter 1, Part 1, and Clause 3A of the EPBC Act. The assessment against the principles of ecologically sustainable development is summarised in Table 18-1.

Table 18-1 EPBC Act Principles of ecologically sustainable development

Reference	Object	Assessment approach	Relevant sections of the PER
a	Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations.	<p>An assessment of the feasible alternatives for the action and relevant environmental outcomes has been undertaken during the development of North East Link.</p> <p>The assessment integrated both the long term and short term economic, environmental, social and equitable considerations to determine the preferred corridor and options for the reference project.</p>	<ul style="list-style-type: none">Chapter 4 – Feasible alternatives.

Reference	Object	Assessment approach	Relevant sections of the PER
b	If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	<p>An environmental impact assessment has been undertaken for North East Link so that potential environmental impacts of the action are understood with a high degree of certainty. No threats of serious or irreversible environmental damage have been identified, providing appropriate impact avoidance and mitigation measures are employed.</p> <p>Lack of scientific certainty has not been a factor in postponing any measures to prevent environmental degradation.</p> <p>North East Link is therefore considered to be consistent with the precautionary principle.</p>	<ul style="list-style-type: none"> Chapter 5 – Description of the environment Chapter 7 – Impacts on listed threatened species and communities and migratory species. Chapter 8 – Water-related impacts. Chapter 9 – Impacts on the whole of the environment on Commonwealth land. Chapter 10 – Proposed avoidance and mitigation measures.
c	The principle of inter-generational equity – that the present generation should ensure the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.	<p>Driven by changes in population, economy and areas of urban growth, Melbourne faces a number of transport challenges. Project objectives and guiding principles for North East Link would reduce the impact of increasing transport challenges into the future.</p> <p>The preparation of construction and operation environmental management plans, and the implementation of avoidance and mitigation measures would minimise environmental impacts. North East Link would not adversely affect future generations.</p>	<ul style="list-style-type: none"> Chapter 2 – Objectives of the action. Chapter 10 – Proposed avoidance and mitigation measures.

Reference	Object	Assessment approach	Relevant sections of the PER
d	The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.	<p>An ecological assessment was undertaken for North East Link to assess potential impacts on threatened species, habitats and native vegetation, in consideration of impacts to biological diversity.</p> <p>North East Link would be largely located within a previously disturbed environment and, although availability of potential habitat for some threatened species may be reduced by North East Link, measures would be implemented to mitigate and offset this impact as appropriate.</p> <p>North East Link has been designed in consideration of potential ecological impacts, and surface impacts have been avoided in ecologically sensitive areas by tunnelling where possible. Proposed mitigation and avoidance measures have been developed in consideration of the conservation of biological diversity and ecological integrity of the action.</p>	<ul style="list-style-type: none"> Chapter 7 – Impacts on listed threatened species and ecological communities, and on migratory species. Chapter 10 – Proposed avoidance and mitigation measures. PER Technical Appendix A – Flora and fauna technical report.
e	Improved valuation, pricing and incentive mechanisms should be promoted.	<p>The implementation of avoidance and mitigation measures would reduce potential adverse impacts to the environment and potentially result in economic costs to the construction and operation of North East Link. In some instances, where North East Link could be designed to reduce environmental impacts this would also likely reduce the cost of management. This indicates the value of environmental resources and pricing and incentive mechanisms have been considered when designing and developing environmental management requirements for North East Link.</p>	<ul style="list-style-type: none"> Chapter 10 – Proposed avoidance and mitigation measures. Chapter 16 – Economic and social matters.

18.2 Objects of the EPBC Act

The objects outlined in Section 3 of the EPBC Act set the general framework to the Act, and any proposals assessed under the Act. North East Link has been assessed against the objects of the Act, as summarised in Table 18-2.

Table 18-2 Objects of the EPBC Act

Reference	Object	Assessment approach	Relevant PER chapter, technical report and attachment
a	To provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance.	<p>The process of developing the PER for the action provides a mechanism for protecting the environment, by assessing potential impacts on the environment by the action before any works started.</p> <p>The PER was prepared in parallel with development of the reference project and the EES. Where possible, identified impacts were avoided through amendment to the reference project.</p> <p>Ecological assessments have been undertaken during this process, which have identified the existing ecology within the area impacted by the action, including any MNES. This identification and assessment has allowed for development of avoidance and mitigation measures to address the impacts of the action, and provide protection for environmental matters.</p>	<ul style="list-style-type: none"> Chapter 5 – Description of the environment. Chapter 7 – Impacts on listed threatened species and ecological communities, and on migratory species. Chapter 9 – Impacts on the whole of the environment on Commonwealth land. Chapter 10 – Proposed avoidance and mitigation measures. Chapter 11 – Offsets. Chapter 12 – Environmental outcomes. PER Technical Appendix A – Flora and fauna technical report.
b	To promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources.	<p>The PER has assessed the action against the principles of ecological sustainable development as set out under Clause 3A of the EPBC Act, and sets out avoidance and mitigation measures to minimise potential impacts on natural resources.</p> <p>North East Link is considered to be consistent with the principles of ecological sustainable development.</p>	<ul style="list-style-type: none"> Table 18-1 Principles of ecologically sustainable development. Chapter 10 – Proposed avoidance and mitigation measures.

Reference	Object	Assessment approach	Relevant PER chapter, technical report and attachment
c	To promote the conservation of biodiversity.	The PER has assessed the potential impacts of North East Link on biodiversity and proposed avoidance and mitigation measures which promote conservation.	<ul style="list-style-type: none"> Chapter 7 – Impacts on listed threatened species and ecological communities, and on migratory species. Chapter 9 – Impacts on the whole of the environment on Commonwealth land. Chapter 10 – Proposed avoidance and mitigation measures.
c	To provide for the protection and conservation of heritage.	The PER has assessed the potential impacts of North East Link on historic and Aboriginal cultural heritage on Commonwealth land, and proposed avoidance and mitigation measures which provide for its protection.	<ul style="list-style-type: none"> Chapter 9 – Impacts on the whole of the environment on Commonwealth land. Chapter 10 – Proposed avoidance and mitigation measures.
d	To promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and Indigenous peoples.	<p>A comprehensive program of public engagement for North East Link provided stakeholders with opportunities to participate in the development and delivery of the action.</p> <p>Consultation included governments, the community, land-holders and Aboriginal communities. Proposed avoidance and mitigation measures have been developed in consideration of stakeholder communications, feedback and responses.</p>	<ul style="list-style-type: none"> Chapter 14 – Consultation. Chapter 10 – Proposed avoidance and mitigation measures.
e	To assist in the co-operative implementation of Australia's international environmental responsibilities.	The PER provides for assessment of impacts of North East Link on flora and fauna. The flora and fauna assessed includes MNES, which in turn includes migratory species and wetlands of international importance (Ramsar listed wetlands). This process alerts the Commonwealth to any actions that may have a bearing on international environmental responsibilities and how any impacts would be managed. North East Link is not expected to have a significant impact on migratory species or Ramsar listed wetlands.	<ul style="list-style-type: none"> Chapter 7 – Impacts on listed threatened species and ecological communities, and on migratory species. PER Technical Appendix A – Flora and fauna technical report.

Reference	Object	Assessment approach	Relevant PER chapter, technical report and attachment
f	To recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity.	<p>The Traditional Owners of the majority of the land affected by the action are the Wurundjeri people of the Kulin Nation who are represented by the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC).</p> <p>As part of project development, North East Link Project (NELP) has been working in collaboration with the Wurundjeri on multiple levels. This has included involvement in the development of the EES and PER, Urban Design Strategy, Cultural Values Mapping, attendance at EES Technical Reference Group and related meetings, workshops and walks on Country.</p>	<ul style="list-style-type: none"> Chapter 14 – Consultation.
g	To promote the use of Indigenous people's knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.	<p>As part of project development, NELP has been working in collaboration with the Wurundjeri. This has included involvement in the development of the EES and PER, Urban Design Strategy, Cultural Values Mapping, attendance at EES Technical Reference Group and related meetings, workshops and walks on Country.</p>	<ul style="list-style-type: none"> Chapter 14 – Consultation.

18.3 Unavoidable impacts on MNES due to the action

Avoidance and mitigation measures are proposed to address direct and indirect impacts of North East Link, including their contribution to any cumulative impacts on MNES and Commonwealth land. Impacts on one MNES, the listed threatened flora species Matted Flax-lily, and on native vegetation on Commonwealth land are unavoidable, but would be mitigated or offset.

Up to 95 Matted Flax-lily plants/patches from five sites were recorded within the North East Link project boundary. A description of Matted Flax-lily and its habitat is provided in Chapter 5 – Description of the environment and relevant impacts are discussed in Chapter 7 – Impacts on listed threatened species and ecological communities, and on migratory species and Chapter 9 – Impacts on the whole of the environment on Commonwealth land.

The Matted Flax-lily population affected by North East Link would be translocated to suitable recipient sites in accordance with an approved Salvage and Translocation Plan to minimise impacts, as agreed with DELWP and the Australian Government. Translocation of Matted Flax-lily has been successfully completed for other major projects, and the method to achieve success is well documented. With successful translocation, the residual impact of the action on Matted Flax-lily is expected to be non-significant.

Simpson Barracks contains significant flora values including 52.5 hectares of remnant native vegetation. The area within Simpson Barracks that intersects with the project boundary largely comprises Plains Grassy Woodland (EVC 55), dominated by River Red Gum. A description of native vegetation on Commonwealth land is provided in Chapter 5 – Description of the environment and relevant impacts are discussed in Chapter 9 – Impacts on the whole of the environment on Commonwealth land.

Native vegetation impacted directly through vegetation clearance or predicted to be impacted indirectly due to groundwater drawdown would be offset along with the rest of the vegetation being lost due to the action (that is outside Commonwealth land) under the State process, meeting the assessment and offset requirements of the *Victorian Guidelines for the removal destruction and lopping of native vegetation* (DELWP, 2017).

As discussed in Chapter 9 – Impacts on the whole of the environment on Commonwealth land, 44 large Studley Park Gum trees are expected to be directly lost from inside the project boundary on Commonwealth land due to North East Link. A further three large Studley Park Gum trees have the potential to be lost from outside the project boundary on Commonwealth land due to groundwater drawdown during operation in the long-term.

The project proposes to implement mitigation based on the Studley Park Gum Groundwater Dependent Ecosystem Monitoring and Mitigation Strategy to monitor the health of at risk trees and implement mitigation measures (such as watering) throughout the construction phase of the project. The project is expected to have a significant residual impact on Studley Park Gum as an element of the environment on Commonwealth land (noting that Studley Park Gum is not listed under the EPBC Act). NELP proposes to contribute to the conservation of Studley Park Gum by establishing new habitat through the implementation of the Studley Park Gum Management Framework. This would include collecting seed and establishing a new population of Studley Park Gum.

In addition to the above, at the State level native vegetation offsets would be provided based on the Victorian Guidelines (DELWP, 2017a) to offset for the removal of native vegetation (which Studley Park Gum trees form part of) directly impacted by the project, and three Studley Park Gum trees expected to experience premature mortality due to long term groundwater drawdown.

Environmental outcomes have been proposed for Matted Flax-lily, native vegetation on Commonwealth land and Studley Park Gum on Commonwealth land. These are discussed in Chapter 12 – Environmental outcomes.

Overall these impacts are expected to be managed to an environmentally acceptable level, with the benefits of the action outweighing these impacts. On balance, the action is considered justified.