

I. Introduction

I.1 What is proposed?

I.1.1 The Pacific Highway Upgrade Program

The Pacific Highway ('the highway') between Hexham in New South Wales (NSW) and the Queensland border has sections with inadequate traffic capacity, and has a poor record for road accidents and fatalities. The nature and condition of the highway varies considerably, from high quality dual carriageways to stretches of two-lane single carriageway. At a number of locations there are extensive delays during peak periods, especially during the summer holidays.

In 1996, in response to the projected increase in traffic volumes and unacceptably high accident rates on the Pacific Highway, the NSW and Federal governments announced their joint commitment to the Pacific Highway Upgrade Program, a \$2.2 billion, 10 year program to improve the standard of the Pacific Highway, eliminate accident 'blackspots' and cut overall journey times, by upgrading much of the highway between Hexham and the Queensland border.

As of December 2006, a total of 254 kilometres of the Pacific Highway is now a double-lane divided road. The remaining length of the highway is either under construction, has been approved for construction or has a preferred route identified.

Following completion of the 10-year program in June 2006, the NSW and Federal governments have agreed to further funding of \$1.3 billion for the three years to mid 2009. This funding is being used to fund the completion of a number of upgrading projects, as well as the planning for other projects. For the Kempsey to Eungai Pacific Highway Upgrade, this funding will be used to complete the planning and acquire properties on the basis of a hardship.

In addition, the NSW and Federal governments have also signed a Memorandum of Understanding to explore funding options to accelerate the completion of the Pacific Highway to dual carriageway. A working party has been established to investigate options for completing the Pacific Highway upgrade as quickly as possible.

The Pacific Highway Upgrade Program is being implemented by the NSW Roads and Traffic Authority (the RTA).

The locations of past and proposed projects identified under the Pacific Highway Upgrade Program, including the proposed upgrade, are shown in Figure I-1. The objectives of the Program are to:

- Significantly reduce road accidents and injuries.
- Reduce travel times.
- Reduce freight transport costs.
- Develop a route that involves the community and considers its interests.
- Provide a route that supports economic development.
- Manage the upgrading of the route in accordance with ecologically sustainable development principles.
- Provide the best value for money (NSW Roads and Traffic Authority 1997).

The project-specific objectives for the Kempsey to Eungai Pacific Highway Upgrade project (the 'proposed upgrade') are outlined in Section 2.5.

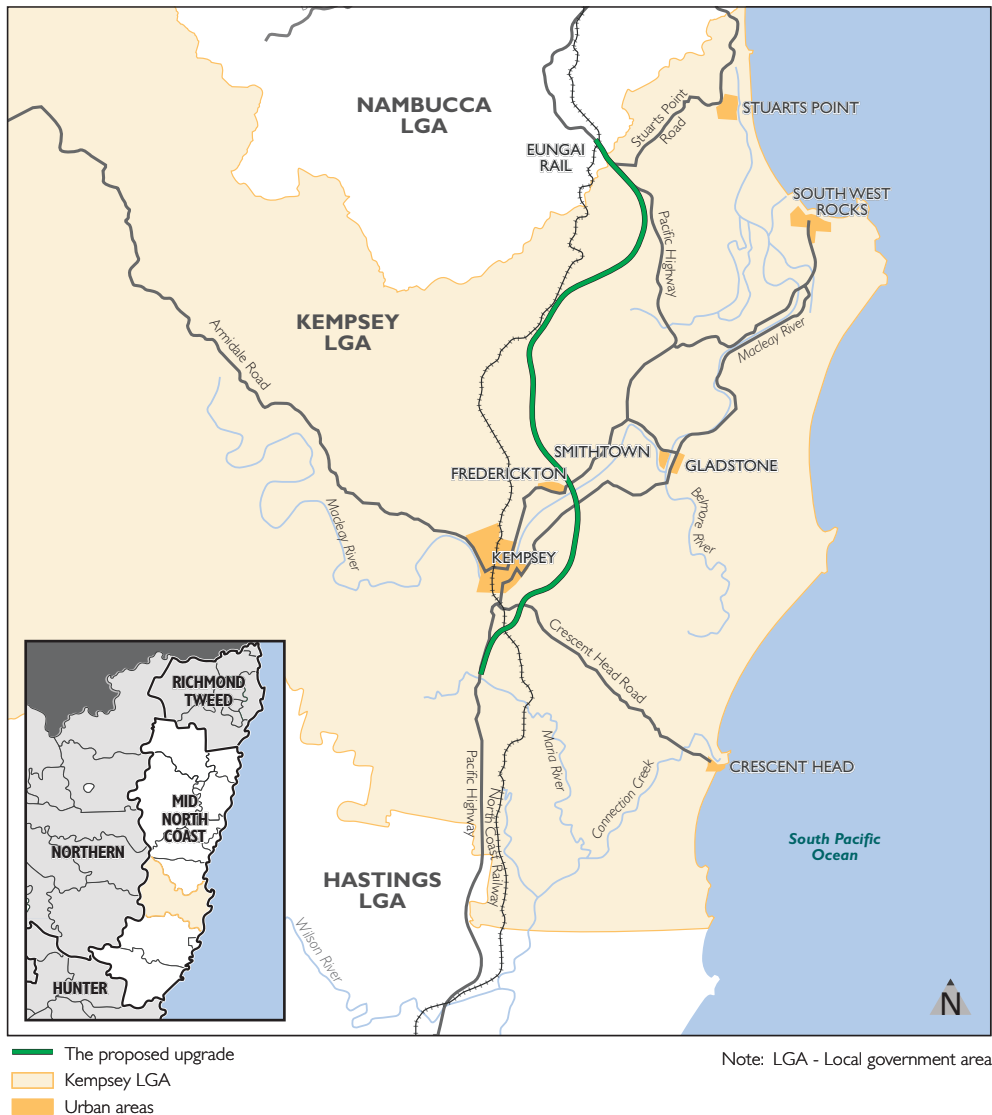
Figure I-1 Pacific Highway Upgrade Program



I.1.2 Overview of the proposed upgrade

The proposed upgrade is the subject of this Environmental Assessment. The proposed upgrade extends from south of Kempsey to Eungai in the Mid North Coast region of NSW. It lies mainly within the Kempsey local government area, with a short length located within the neighbouring Nambucca local government area, as shown in Figure I-2.

Figure 1-2 Regional and local government context



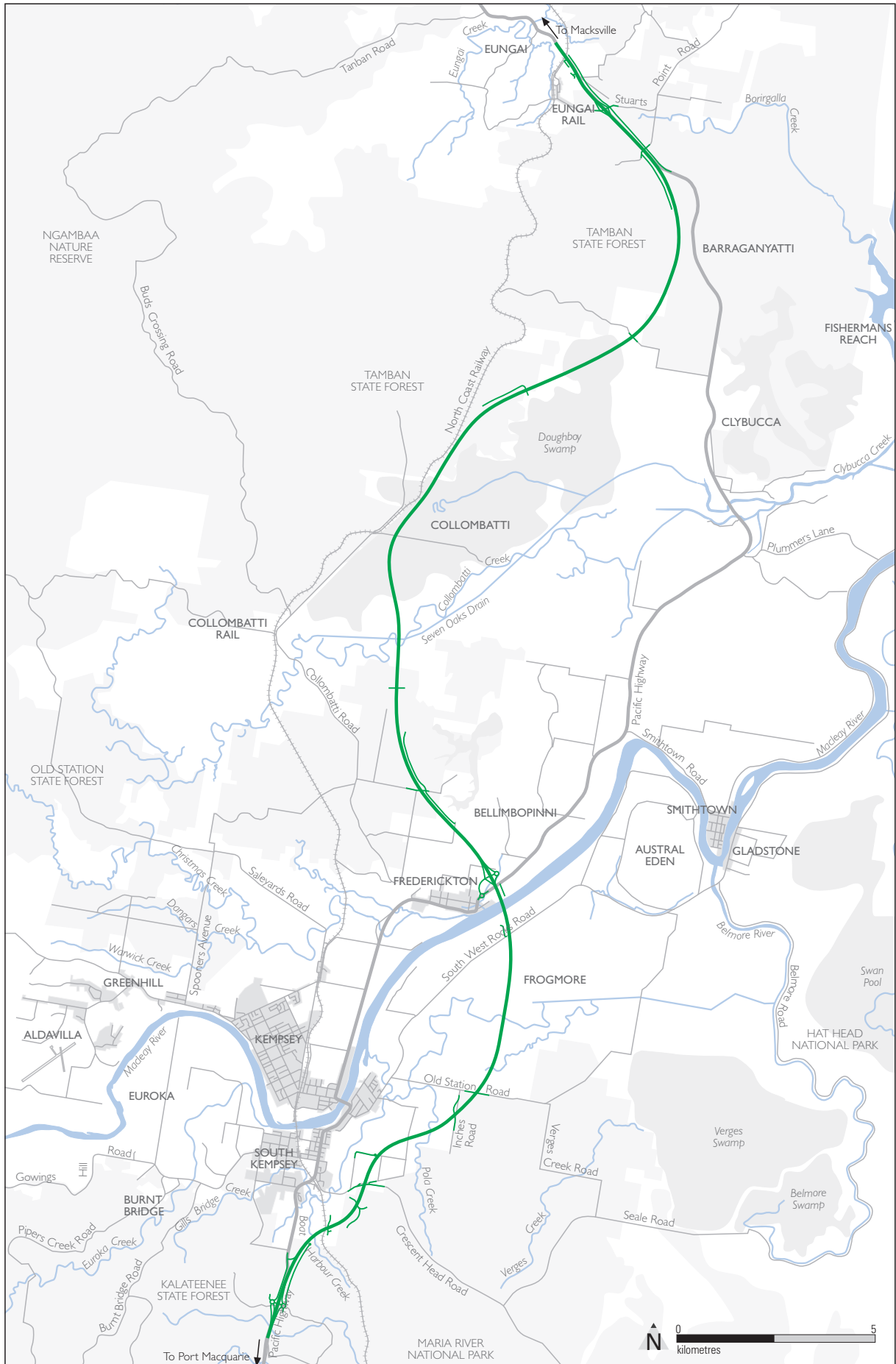
The proposed upgrade involves the construction of approximately 40.8 kilometres of four-lane divided carriageway (capable of being upgraded to six lanes when required).

As shown in Figure 1-3, the proposed upgrade would diverge in a north-easterly direction from the existing Pacific Highway approximately 6.7 kilometres south of Kempsey, pass over the Macleay River floodplain east of Kempsey and cross the Macleay River north-east of Frederickton. From Frederickton, the proposed upgrade would pass to the west of the existing highway through Collombatti and the edge of the Tambaran State Forest, and north through Barraganyatti to join the existing highway south of Eungai Rail. The northern end of the proposed upgrade would be an upgrade and duplication of approximately 3.7 kilometres of the existing highway.

Other features of the proposed upgrade include:

- Provision of grade-separated interchanges at three locations:
 - At South Kempsey – south of the South Kempsey industrial area providing access to the existing Pacific Highway, the town of Kempsey and coastal towns (refer Section 6.1.3).

Figure I-3 The proposed upgrade



— The proposed upgrade

- At Frederickton – between the Frederickton golf club and sewage treatment works, providing access to the towns of Frederickton, Smithtown and Gladstone (refer Section 6.1.3).
- At the Stuarts Point Road intersection – south of Eungai Rail, connecting the areas of Barraganyatti, Stuarts Point and Eungai Rail to the upgraded highway (refer Section 6.1.3).
- Construction of approximately 2.19 kilometres of bridging over the Macleay River and its floodplain in the Frogmore and Frederickton areas (refer Section 6.1.4).
- Provision of 20-year flood immunity for the highway south of the Macleay River crossing and 100-year flood immunity for the highway north of the Macleay River crossing.
- Construction of a flood levee at Frederickton, providing 100-year flood immunity to residential and commercial premises (refer Section 6.2.2).

1.2 How has the proposed upgrade been developed?

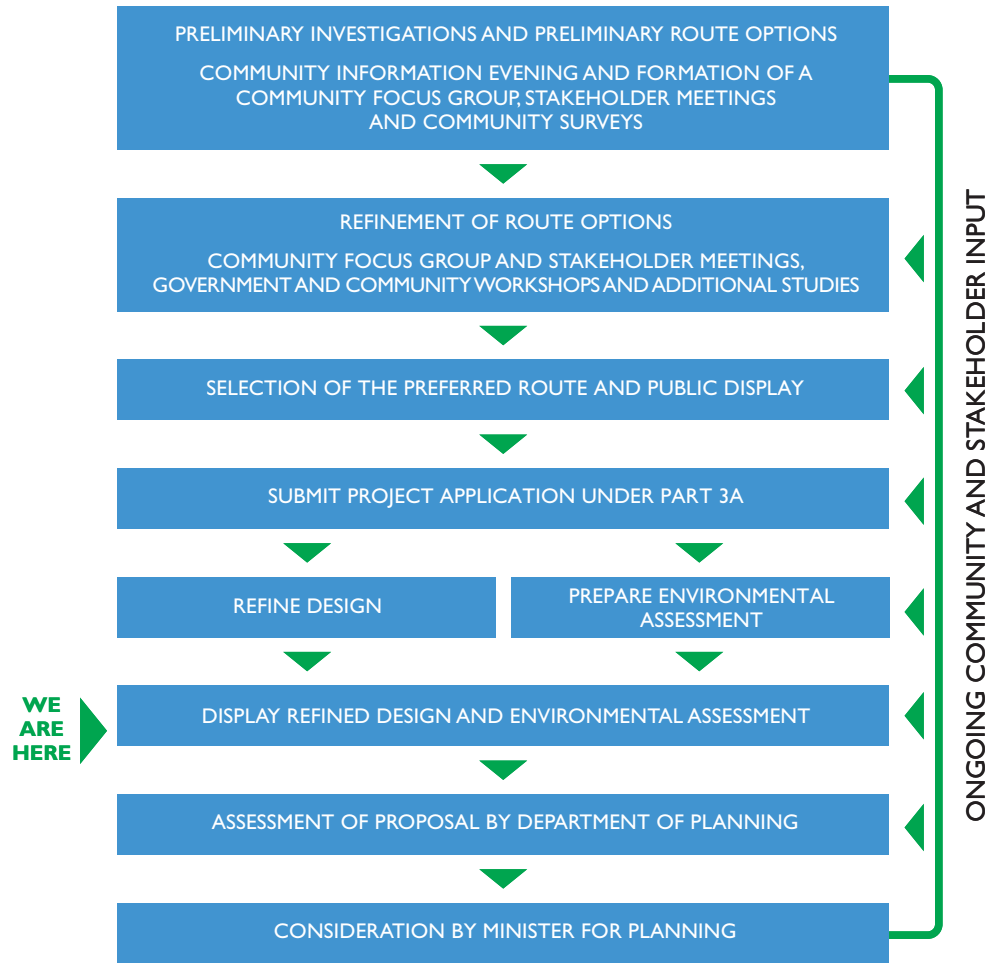
As outlined in Section 1.1.1, there are a number of Pacific Highway Upgrade projects currently under development by the RTA.

The development of an upgrade project is generally carried out in three broad phases:

- *Route selection phase* – preliminary investigations, community consultation, development and refinement of route options, including preliminary concept designs and selection of the preferred route.
- *Concept design, environmental assessment and proposal determination phase* (hereafter called 'concept design and environmental assessment phase') – detailed environmental investigations and community consultation, development of concept design and preparation of environmental assessment documentation for planning and environmental approvals.
- *Project delivery phase* – detailed design, land acquisition and construction of the proposed upgrade.

The sequence of project development for the proposed Kempsey to Eungai Pacific Highway upgrade and the project's current stage of development are outlined in Figure 1-4.

Figure I-4 Project development process



1.3 How will the proposed upgrade be assessed?

Initial consideration of the proposed upgrade commenced in 2001. Community, stakeholder and agency consultation and options evaluation have continued since that time. However, changes to the *Environmental Planning and Assessment Act 1979* (EP&A Act) in August 2005 mean that major infrastructure projects such as the proposed upgrade are now assessed under a new Part of the Act, Part 3A. Further, the proposed upgrade has been deemed critical infrastructure by the Minister for Planning.

Part 3A establishes an assessment and approval process for 'major infrastructure projects' and other developments of state or regional significance in NSW. The process for considering the proposed upgrade and opportunities for public comment are outlined in the following sections. A more detailed description of the project approval process for critical infrastructure under Part 3A, is provided in Section 3.1.

1.3.1 The Environmental Assessment

Under Part 3A, an Environmental Assessment is required to address the requirements, called 'Environmental Assessment requirements' (refer Appendix A), which are issued by the Director-General of the NSW Department of Planning after consultation with other key government stakeholders. The Environmental Assessment demonstrates that the project proponent (the RTA) has addressed the potential environmental impacts of the project through extensive

concept design development, robust assessment and the development of appropriate mitigation and management measures.

The Environmental Assessment provides a description of the proposed upgrade, the changes to the existing environment likely to result from the construction and operation of the proposed upgrade, and how the RTA proposes to mitigate or manage any residual impacts associated with these changes.

The Environmental Assessment will be submitted to the Director-General of the NSW Department of Planning. Once the Director-General is satisfied that the Environmental Assessment adequately addresses the Environmental Assessment requirements, the Environmental Assessment will proceed to public display.

1.3.2 Opportunities for public comment

The Department of Planning will make the Environmental Assessment publicly available for a minimum period of 30 days. During this period, the Environmental Assessment will be available for inspection on the Department of Planning website www.planning.nsw.gov.au, on the project website at www.rta.nsw.gov.au/pacific and at selected RTA offices and other locations.

During this phase, the RTA will also conduct community information sessions to ensure the community and stakeholders are aware of the exhibition of the Environmental Assessment and are provided with information to allow them to make informed comments in their submissions on the report and/or the proposed upgrade. A 1800 project information line will also be available throughout the exhibition period (phone 1800 306 004 toll free).

Any person (including a public authority) may make a written submission to the Director-General regarding the proposed upgrade and/or this Environmental Assessment during the exhibition period. Submissions should be made to:

Director – Major Infrastructure Assessment
Department of Planning
GPO Box 39
Sydney NSW 2001

Further information on community consultation activities during the exhibition of the Environmental Assessment is provided in Chapter 4 – *Community and stakeholder involvement*.

1.3.3 Consideration of submissions

Submissions made during the exhibition period will be compiled by the Department of Planning and provided to the RTA and other relevant authorities. The Director-General may then require the RTA to submit a response to the submissions in the form of a submissions report. If the RTA proposes any changes to the project to further address its environmental impact, the RTA would be required to prepare a preferred project report, which would be made available to the public. The Director-General may also require the RTA to submit a revised Statement of Commitments.

The assessment of submissions made in response to the exhibition of the Environmental Assessment is an integral part of the approval process and could result in modifications and improvements to the design of the proposed upgrade.

1.3.4 Director-General Report to the Minister for Planning

The Director-General will then provide a comprehensive report on the upgrade to the Minister for Planning. This report will include a copy of this Environmental Assessment and any preferred project report, advice from public authorities and any other assessment the Director-General may require.

1.3.5 Making a decision

Having examined the Environmental Assessment and submissions report (if required), the Report of the Director-General and any advice from the Minister for Roads, the Minister for Planning will then make a decision as to whether the proposed upgrade should be approved. Section 3.1 describes the decision making process in more detail.

1.3.6 Post-approval activities

Should the proposed upgrade be approved and the RTA makes a determination to proceed with the proposed upgrade, the RTA would:

- Notify the local community of the decision to proceed with the proposed upgrade by correspondence, newspaper notices and/or newsletters (such notification would include an indication of the anticipated timing of construction works and contact details for further information).
- Notify property owners affected by acquisition soon after the announcement of the decision to clarify likely impacts on individual properties and the anticipated timing and staging of construction (owners would be kept informed and consulted during the design and construction process).
- Prepare a detailed Construction Environmental Management Plan for the construction phase of the proposed upgrade before construction commences.
- Meet all conditions stipulated in the approval either directly or through contractual arrangements with its contractors.

If there is a change to the preferred activity and the Director-General of the Department of Planning requires it, the RTA would then make the following documents available for public inspection at selected locations:

- The approval of the NSW Minister for Planning (including any conditions).
- The submissions report and preferred project report (if required).
- The Assessment Report of the Director-General of the Department of Planning.

1.4 Approach to the Environmental Assessment

As part of the development of the Environmental Assessment requirements under Part 3A, a planning focus meeting was conducted by the Department of Planning in Kempsey on 30 August 2006. The meeting brought together various NSW Government agencies and the Kempsey Shire Council to discuss the preliminary design of the proposed upgrade and determine the key issues requiring further consideration in the Environmental Assessment.

The Environmental Assessment (this document) has drawn upon information already provided in the Project Application Report and draft Statement of Commitments for the proposed upgrade (NSW Roads and Traffic Authority 2006a), and also addresses the key issues identified in the Director-General's Environmental Assessment requirements (Appendix A).

The Environmental Assessment includes an environmental risk assessment (see Chapter 9 – *Environmental risk analysis*) prepared in accordance with the Environmental Assessment requirements and incorporates input from various government agencies and other stakeholders during the consultation process.

1.5 Structure and content of the Environmental Assessment

The structure and content of this Environmental Assessment is summarised in Table 1-1.

Table 1-1 Structure and content of this Environmental Assessment

Part	Chapter	Description
Volume I – Environmental Assessment		
Part A Introduction and the need for the Proposal	Chapter 1 <i>Introduction</i>	Outlines the background to the project, the project proponent, location and objectives, and provides a guide to the approval requirements and the Environmental Assessment.
	Chapter 2 <i>Context and need for the proposed upgrade</i>	Outlines the need for the project and the anticipated project benefits.
	Chapter 3 <i>Planning and approvals</i>	Outlines the legislation, planning strategies and policies that apply to the project.
	Chapter 4 <i>Community and stakeholder involvement</i>	Outlines how the community and stakeholders have been and will be involved in the development of the proposed upgrade; and summarises the issues raised by the community/stakeholders.
Part B Route selection and design development	Chapter 5 <i>Approach to route selection and design</i>	Outlines the assessment of route alternatives and development of the preliminary and concept design of the proposed upgrade in accordance with project objectives and design principles and criteria.
Part C The Proposal	Chapter 6 <i>Concept design</i>	Provides a detailed description of the physical works that make up the project.
	Chapter 7 <i>Detailed design and construction of the proposed upgrade</i>	Details the next steps in the delivery of the proposed upgrade and how the project is likely to be constructed.
	Chapter 8 <i>Environmental management</i>	Provides an overview of the framework of environmental management to be adopted during the detailed design and construction phase of the project.

Part	Chapter	Description
Part D Environmental Assessment	Chapter 9 <i>Environmental risk analysis</i>	Details the risk process by which the key environmental issues for assessment were determined.
	Chapter 10 <i>Hydrology and water management</i>	Describes the potential impact of the proposed upgrade on hydrology and water management and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 11 <i>Biodiversity</i>	Describes the potential impact of the proposed upgrade on flora and fauna and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 12 <i>Geology and soils</i>	Describes the potential impact of the proposed upgrade on geology and soils and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 13 <i>Hazard and risk</i>	Describes hazards and risks associated with the construction and operation of the proposed upgrade and outlines measures proposed to avoid, remedy or mitigate hazard and risks.
	Chapter 14 <i>Traffic, transportation and access</i>	Describes the potential impact of the proposed upgrade on traffic, transport and access and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 15 <i>Land use and property</i>	Describes the potential impact of the proposed upgrade on land use and property and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 16 <i>Noise and vibration</i>	Describes the potential noise and vibration impacts of the proposed upgrade and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 17 <i>Heritage</i>	Describes the potential impact of the proposed upgrade on Indigenous and non-Indigenous heritage and outlines measures proposed to avoid, remedy or mitigate those impacts. Describes the approach undertaken to Aboriginal consultation.
	Chapter 18 <i>Socio-economic impacts</i>	Describes the potential impact of the proposed upgrade on the social and economic environment and outlines measures proposed to avoid, remedy or mitigate those impacts.
	Chapter 19 <i>Landscape and visual impacts</i>	Describes the potential impact of the proposed upgrade on the visual environment and outlines measures proposed to avoid, remedy or mitigate those impacts.
Chapter 20 <i>Air quality</i>	Describes the potential impact of the proposed upgrade on air quality in comparison to conditions without the proposed upgrade and outlines measures proposed to avoid, remedy or mitigate those impacts.	
Chapter 21 <i>Other environmental issues</i>	Describes the potential impact of the proposed upgrade on other (non-key) environmental issues and outlines measures proposed to avoid, remedy or mitigate those impacts. Outlines the sustainability performance of the project including the expected greenhouse gas emissions and potential offsets to reduce greenhouse gas emissions.	

Part	Chapter	Description
Part E Justification and Conclusions	Chapter 22 <i>Justification and conclusions</i>	Outlines the justification for proceeding with the proposed upgrade, considering the project objectives, the significance of expected environmental impacts, consistency with principles of ecologically sustainable development, the suitability of the corridor for the location of the proposed upgrade, the public interest and the consequences of not proceeding with the proposed upgrade. Outlines the next steps in the consideration of the proposed upgrade.
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Appendices	Appendix A <i>Director-General's Environmental Assessment requirements</i>	Detailed Environmental Assessment requirements issued by the Department of Planning outlining key issues requiring consideration in the Environmental Assessment.
	Appendix B <i>Checklist of key issues to be addressed in the Environmental Assessment</i>	Provides cross-referencing for key issues addressed in the Environmental Assessment.
	Appendix C <i>Summary of issues raised during community and stakeholder consultation</i>	Provides a summary of issues raised during community and stakeholder consultation and cross-references where these were addressed in the Environmental Assessment.
	Appendix D <i>Draft Statement of Commitments</i>	Provides a draft overview of all commitments made by the RTA to manage residual impacts associated with the proposed upgrade.
	Appendix E <i>RTA Land Acquisition Policy</i>	Provides a copy of the RTA <i>Land Acquisition Policy</i> .
	Appendix F <i>Indicative method for subsurface investigations of potential archaeological deposits</i>	Provides an outline of the methodology for the subsurface archaeological investigations.
	Appendix G <i>Study team</i>	Lists individuals and organisations involved in the development of the concept design and preparation of the Environmental Assessment

Volume 2 – Environmental Assessment – Technical Reports

Technical Report 1	Supplementary Flooding Report
Technical Report 2	Supplementary Ecological Assessment
Technical Report 3	Noise and Vibration Assessment
Technical Report 4	Climate and Air Quality Assessment
Technical Report 5	Heritage Assessment

The supporting Technical Reports included in Volume 2 of this Environmental Assessment were used to prepare the main Environmental Assessment (Volume 1 – this document).

The mitigation and management measures recommended in the technical reports have been taken into account in developing the likely mitigation measures and further investigations for the proposed upgrade. These have been incorporated into the draft Statement of Commitments.

If there is any conflict between the measures recommended in the technical reports and the draft Statement of Commitments, the latter takes precedence.

The RTA's draft Statement of Commitments for the proposed upgrade is set out in Appendix D. This outlines the commitments the RTA would make to ensure the ongoing protection of the environment and the community during the construction and operation of the proposed upgrade, as well as during any further work required to finalise the concept design and establish an environmental management framework. Should approval be granted by the Minister for Planning, the Statement of Commitments would form part of the conditions of approval.