

21 Strategic and project justification

This chapter addresses the strategic need for the proposed upgrade, including how the proposed upgrade would meet the identified project needs and that of the Pacific Highway Upgrade Program. The table below identifies the key issues for the assessment in the environmental assessment requirements. Note that some of these issues are addressed in earlier chapters.

Environmental assessment requirements	Where addressed
Strategic Justification	
Outline the strategic outcomes for the Pacific Highway Upgrade Program, including with respect to strategic need and justification:	Section 2.1
> The aims and objectives of relevant State planning policies	Section 2.2
> The principles of ecologically sustainable development	Section 21.3
> Cumulative and synergistic impacts associated with the program as a whole	Section 21.2
Identify how the project fits within these strategic outcomes and how impacts associated with the project would be considered and managed to achieve acceptable environmental outcomes across the Pacific Highway Upgrade Program. Describe:	
> The need for and objectives of the project	Sections 2.4 and 2.6
> Alternatives considered (including an assessment of the environmental costs and benefits of the project relative to alternatives)	Section 2.4
> Provide justification for the preferred project taking into consideration the objects of the Environmental Planning and Assessment Act 1979	Sections 21.1 and 21.4

21.1 Benefits and impacts of the Pacific Highway Upgrade Program and the proposed upgrade

The *strategic and project need* for the Pacific Highway Upgrade Program (PHUP) and the proposed upgrade are discussed in Chapter 2.

The *strategic and project justification* for the PHUP and the proposed upgrade are outlined below in terms of their expected benefits and 'cumulative' and 'synergistic impacts' relative to the strategic objectives and desired outcomes of the program.

Expected benefits

Transport desired outcome: improved safety and travel times.

The program is expected to have significant benefits for transport and public safety.

The total reduction in the number of vehicle accidents as a result of the PHUP in the 30 years from 2006 are estimated to be 3,200 and 3,800, with a corresponding reduction in fatalities of between 130 and 155 (RTA 2005), relative to the base case of no upgrade.

The proposed upgrade would have a corresponding decrease in accidents, injuries and fatalities. The target for the proposed upgrade is a reduction in accident rates from 36 accidents per million vehicle kilometres travelled (MVKT) to 15 per MVKT.

Travel time savings for a highway user travelling in a car between the F3 Freeway and the NSW-Queensland border are estimated at approximately 90 minutes, relative to the base case of no upgrade (beyond what had already been completed by 2006) (RTA 2005). It follows that these travel time savings would also be achieved by commercial vehicles, thereby leading to significantly reduced freight costs.

The contribution of the proposed upgrade to this total travel time saving is approximately 2 minutes for cars and 2.5 minutes for commercial vehicles during normal operation. This time saving would be greater in busy periods.

Economic desired outcome: improved opportunities for regional economic development

The overall program would generate substantial regional economic development benefits in terms of the additional economic activity and employment induced by construction expenditure and the anticipated reduction in road transport costs. It is estimated that the present value of the increases in annual regional output by the program is \$3.1 billion. An estimated creation of between 85,000 and 110,000 jobs (directly and indirectly) would occur during construction which would result in the generation of household income of approximately \$2.5 billion to \$3.3 billion. A large proportion of these would be associated with induced tourism and existing regional businesses expanding their output.

The proposed upgrade would ensure that the transport and economic benefits achieved by the other projects in the overall program are able to be capitalised on by the residents and businesses within the region. More specifically the tourism industry would experience growth from improved accessibility to the region. Freight transport costs would also be expected to reduce due to reduced travel time and improved fuel efficiency. Importantly, the proposed upgrade would also support the targeted future levels of population and housing growth on the North Coast as identified in the *Far North Coast Regional Strategy* (NSW Department of Planning 2006).

Social desired outcome: improved access to employment and community services

Substantial direct benefits of the program would accrue to road users, through improved safety, reduced crashes and reductions in the costs of travel. Reduced travel times would also improve access to employment opportunities and community services and facilities for resident populations. The flow-on effects would produce further social benefits in the form of reductions in costs for public transport users and increased economic activity and employment. Public transport users would, however, need to rely on possible cost reductions and beneficial flow-on effects for public transport availability to gain accessibility benefits.

The key social benefits gained from the proposed upgrade would relate to accessibility and public safety, including the separation of local and through traffic.

Environmental desired outcome: protection and enhancement of the natural and built environment

There are a range of cumulative environmental impacts associated with the PHUP. Some of the cumulative impacts are discussed earlier in the environmental assessment (ecology in **Chapter 12** and heritage in **Chapter 16**). There are also a range of amenity and other social impacts on some residents and communities that would occur as a result of the PHUP including impacts relating to visual amenity, noise and community severance. As an important part of the PHUP these impacts have been minimised through route selection and project design, and would continue to be minimised in the procedures associated with construction.

There are also a number of cumulative environmental benefits of the PHUP. These include (in general terms) improved air quality, lower resource use and reduced greenhouse gas emissions, and in the case of many communities improved amenity through the relocation of the Pacific Highway away from sensitive areas such as town centres and residential areas.

The proposed upgrade would have some environmental impacts which are discussed in detail in this environmental assessment, along with management measures to minimise these impacts. It is predicted to have benefits for regional air quality and greenhouse gas emissions. Other significant environmental benefits would be realised at the local level. Residents on the existing Pacific Highway, where this would become a local access road, would experience some amenity benefits. The proposal also includes a program of riparian restoration in which would provide environmental enhancement and improve local amenity.

Financial desired outcome: effective and efficient way of investment financial resources

Quantifiable monetary benefits of the program, such as savings in vehicle operating costs, travel time and avoided crashes, would be substantial. The program is estimated to result in net savings (after construction costs have been taken into account) with a present value of between approximately \$540 million and \$1.3 billion.

No separate cost-benefit analysis has been carried out for the proposed upgrade, however it could be expected that the proposed upgrade would contribute to the totals above in a way that is generally proportional to its length. Economic and 'value-for-money' considerations have been integrated into the development of alternative routes for the proposed upgrade and in the selection process for the preferred route.

21.2 Cumulative and synergistic impacts

The upgrade of the Pacific Highway is integral in meeting the needs of regional and state transportation demands as growth pressures along coastal towns increase. Furthermore important transport, economic, social and environmental benefits would be achieved through the overall program and the proposed upgrade. While the program and proposed upgrade both seek to achieve the greatest benefits with the least negative effects, a range of negative impacts, some of which may be cumulative, would also result (**Table 21.1**).

Table 21.1 - Potential cumulative and synergistic impacts of the program and proposed upgrade

Desired Outcome	Program	Project (proposed upgrade)
Transport: improved safety and travel times	> Improved travel times would result in a potentially significant transfer of freight from rail to road due to reduced road transport costs, leading to an increase in heavy vehicles on the road (and associated safety and amenity implications).	> Minor travel time improvement expected; therefore, minimal rail to road transfer expected as result of proposed upgrade itself, relative to overall program.
	> Congestion and slower travel times during roadworks for the various upgrade projects.	> Minor disruption with proposed highway offline to the existing highway allowing existing road network to be maintained for most of the construction period. Some temporary access changes during construction of bridges however relatively small impact in context of overall program due to small scale of project.
Economic: improved opportunities for regional economic development	> Some economic activities may be affected in towns that are bypassed. These could be positive or negative effects, depending on then nature of the activities within the context of the town.	> No towns bypassed. > Small number of businesses potentially affected by changes in access.
	> Lack of availability of road materials for other projects.	> Relatively large material quantities needed for scale of project, due to need for large structures, but relatively small impact in context of overall program due to short upgrade length.
Social: improved access to employment and community services	> The primary beneficiaries would be road users. Others in the community, including disadvantaged groups, would benefit to the extent that cost reductions and other flow-on effects are passed onto public transport users and consumers.	> Minor impact relative to overall program as interchange improvements and local road connections would benefit many in the community. Upgrade would improve local road network by removing through traffic.

Table 21.1 (cont)

Desired Outcome	Program	Project (proposed upgrade)
	<ul style="list-style-type: none"> > Increased severance and amenity impacts on farms or towns not bypassed or areas not upgraded. 	<ul style="list-style-type: none"> > No towns bypassed. > Farms located between the proposed upgrade and the existing Pacific Highway would experience some severance impacts. A remnant land strategy has been developed to minimise impacts. Proposed highway for the most part follows the existing highway alignment closely and as such the impacts are minor in context of the overall program.
	<ul style="list-style-type: none"> > Changes in the character and lifestyle of communities from induced development. 	<ul style="list-style-type: none"> > The proposed highway traverses a rural area where development controls and local environmental plans within the local government areas restrict the level of development. The proposed upgrade is considered to have a minor role in induced development and in context to overall program.
	<ul style="list-style-type: none"> > Impacts on Indigenous culture due to interference or disturbance to cultural sites of heritage. 	<ul style="list-style-type: none"> > Minor impact expected relative to overall program due to small footprint of upgrade in a highly disturbed agricultural area and avoidance of significant impacts on potential areas of Indigenous heritage.
Environmental: protection and enhancement of the natural and built environment	<ul style="list-style-type: none"> > Loss of habitat and severing of wildlife corridors where new route alignments are constructed. > Compensatory programs would offset impacts to some extent. 	<ul style="list-style-type: none"> > Minor impact relative to overall program due to land already cleared for agriculture, small area of vegetation removal, replanting of riparian vegetation and disturbed nature of existing vegetation.
	<ul style="list-style-type: none"> > Increases in fuel use and greenhouse emissions from growth in vehicle use and population levels in the region associated with increased accessibility arising from the program. 	<ul style="list-style-type: none"> > No noticeable impact expected (benefits for fuel use and greenhouse gas emissions expected with a positive outcome in terms of operation versus construction reached around 2022).

Table 21.1 (cont)

Desired Outcome	Program	Project (proposed upgrade)
	> Impacts on landscape by the construction of new roads.	> Substantial element in a scenic landscape. High impact relative to size of project, due to large structures proposed and location on escarpment. Urban and landscape design measures to be a high priority.
	> Some loss of agricultural land to the highway and to new induced development.	> No land expect to be lost to new induced development however loss of agricultural land due to location in a rural area.
	> Potential reduction in water quality and impacts on flooding managed through best practice methods.	> Minor impact relative to overall program due to poor existing water quality. Some potential benefits for water quality in Emigrant Creek catchment. Some localised minor negative impacts. > Location of proposed highway on plateau and escarpment avoids flood prone areas. Bridge structures designed for major flooding events.
	> General improvement in townscape and heritage values (with the exception of isolated locations) due primarily to highway bypasses.	> Minimal impact on townscapes. Significant heritage items have been avoided. Minor impact in context of overall program.
Financial: effective and efficient way of investing financial resources	> Net economic benefit from the PHUP.	> A range of immediate local economic benefits with isolated small negative impacts.

Managing the cumulative impacts of the Program and the proposed upgrade

Table 21.2 summarises the actions, strategies and policies that have or are being implemented in response to these issues, including integration with the principles of ecologically sustainable development. As identified, the proposed upgrade has a synergistic relationship with the program and as such management of the cumulative impacts of the proposed upgrade itself is also discussed.

Table 21.2 - Managing the cumulative impacts of the Pacific Highway Upgrade Program and the proposed upgrade

Cumulative impact	Required management/action/response	Implementation and responsibility
Improved travel times would result in transfer of freight from rail to road	<ul style="list-style-type: none"> > Investigate policies to improve the efficiency of rail operations and manage impacts of increased heavy vehicles on the road network. 	<ul style="list-style-type: none"> > Australian Rail Track Corporation (ARTC) and RailCorp are implementing strategies to improve efficiency of rail operations. > RTA is implementing a Stopping Area Strategy – Driver Reviver Strategy. > RTA is increasing road maintenance funding commensurate with increased truck numbers.
Congestion and slower travel times due to the effects of roadworks for the various upgrade projects	<ul style="list-style-type: none"> > Investigate strategies for traffic management and safety improvements on these sections, particularly with respect to trucks and buses. 	<ul style="list-style-type: none"> > RTA has developed a roadwork coordination scheme that offers ways to minimise the adverse impact of roadwork delays on road users. A key component of this strategy is the dissemination of regular information to Pacific Highway road users and local communities about delays due to highway construction and maintenance activities. This allows road users to plan their journeys and make decisions when scheduling activities. The RTA produces weekly and urgent traffic reports about potential delays. These reports are distributed to service stations along the highway, NRMA branches, RTA motor registries, local councils, tourist centres and the media. > Detailed traffic management measures (including work shutdowns during peak holiday periods) are prepared and implemented for individual projects, including the proposed upgrade.
Some businesses may be detrimentally affected by being bypassed (although the majority would benefit).	<ul style="list-style-type: none"> > Investigate measures to enhance visibility and access to bypassed towns and retail areas and promote local development. No bypasses associated with the proposed upgrade. 	<ul style="list-style-type: none"> > Department of Planning (DoP) and RTA are implementing a retail commercial policy, incorporating a highway service centre policy. > RTA identifies towns by signage and ensures provision of consistent signage. > RTA provides good town access. > Local government, tourism agencies, and regional economic development agencies identify and promote town industries for development. > Local government and regional economic development agencies evaluate long-term socio-economic effects on small towns and rural communities.

Table 21.2 (cont)

Cumulative impact	Required management/action/response	Implementation and responsibility
Lack of availability of road materials for other projects	<ul style="list-style-type: none"> > Investigate and develop strategies for sourcing road materials. 	<ul style="list-style-type: none"> > RTA, Department of Primary Industries, local government and quarry/development industries are undertaking further studies to ensure provision of pavement materials.
Accessibility benefits not shared equitably	<ul style="list-style-type: none"> > Investigate means to improve public transport, including provision of infrastructure for bus depots, bus stops, cycleways, etc. 	<ul style="list-style-type: none"> > AusLink has provided significant funding for upgrading the passenger and freight rail networks. The ARTC is currently upgrading the track and signalling on the North Coast Line. > The RTA is incorporating bus, cycle and pedestrian access improvements into Pacific Highway Upgrade Program projects. > The Ministry of Transport and local government are investigating means to improve public transport services. > The proposed upgrade provides improved safety for buses and cyclists on the existing highway.
Increased severance in towns not bypassed	<ul style="list-style-type: none"> > Develop strategies to reduce severance impacts, early consultation, crossings, tunnels, overpasses. 	<ul style="list-style-type: none"> > The RTA has developed a Stopping Area Strategy, which is a means of coordinating vehicle stopping opportunities as part of the Pacific Highway Upgrade Program. Advantage is taken of facilities provided by major towns in convenient locations. > The concept design for the proposed upgrade includes a number of aspects to reduce severance, including maintaining the current local road network for motorists, cyclists and pedestrians.
Changes in the character and lifestyle of communities (social and environmental effects of induced development)	<ul style="list-style-type: none"> > Implement planning policies to mitigate inappropriate development types. > Monitor cost of living and social justice changes in areas of rapid growth and target policies to disadvantaged groups. 	<ul style="list-style-type: none"> > This is inherently controlled through local and state planning instruments and development application reviews as well as the Department of Planning for any major development. > The cost of living and housing affordability are typical indicators collected intermittently by a variety of measures at a local, state and federal level.

Table 21.2 (cont)

Cumulative impact	Required management/action/response	Implementation and responsibility
Impacts on Indigenous culture	<ul style="list-style-type: none"> > Strategic assessment of potential impacts. > Route planning based on longer sections of highway to provide greater flexibility to avoid culturally significant areas. > Detailed assessment of local impacts during environmental assessment. > Involve Aboriginal communities in the road planning process. > Monitor cumulative impacts. 	<ul style="list-style-type: none"> > Extensive consultation with relevant Aboriginal groups has been undertaken for the proposed upgrade in accordance with Department of Environment and Climate Change (DECC) interim guidelines. > The commitments to environmental protection by the RTA in the environmental assessment include ongoing vigilance of construction and RTA personnel during the construction phase of the proposed upgrade, identification of any potential item of Indigenous archaeological value and appropriate action taken should any such item or area be uncovered. > Impacts are also monitored by the DECC and Aboriginal land councils.
Reduction in biodiversity	<ul style="list-style-type: none"> > Extensive consultation with relevant Aboriginal groups has been undertaken for the proposed upgrade in accordance with Department of Environment and Climate Change (DECC) interim guidelines. > The commitments to environmental protection by the RTA in the environmental assessment include ongoing vigilance of construction and RTA personnel during the construction phase of the proposed upgrade, identification of any potential item of Indigenous archaeological value and appropriate action taken should any such item or area be uncovered. > Impacts are also monitored by the DECC and Aboriginal land councils. 	<ul style="list-style-type: none"> > The baseline monitoring information conducted for every upgrade project is public information contained within the environmental assessments for the project. These documents are provided to government, as are the results of longer-term monitoring during construction and operations. > The RTA is adopting a broader sectional approach to compensatory habitat for the Pacific Highway Upgrade Program on consultation with DECC. > Biodiversity impact predictions were undertaken as part of the options assessment process, which was commented on by the government and the public. > The DoP has released its Far North Coast Regional Strategy 2006-31, which identifies a balance between providing sustainable growth for the region while promoting protection of the 'areas key environmental assets. > The commitments to environmental protection by the RTA in the Environmental Assessment include monitoring during the construction phase of the project. > As part of the project riparian restoration would be undertaken in consultation with local authorities.

Table 21.2 (cont)

Cumulative impact	Required management/action/response	Implementation and responsibility
Increases in fuel use and greenhouse gases	<ul style="list-style-type: none"> > Support improved road design, vehicle design and maintenance. > Implement RTA policy on greenhouse reduction. > Encourage retention of freight on rail. 	<ul style="list-style-type: none"> > The RTA has a strategy to develop road design principles to minimise fuel consumption and the improvement of vehicle engine design to maximise fuel efficiency and minimise emissions. It also has a role on the Advisory Committee on Vehicle Emissions and the State's Motor Vehicle Maintenance Program. > The RTA has prepared a Greenhouse Reduction Plan to address and provide policy in relation to greenhouse gas emissions resulting from its activities. The aim of the plan is the minimising of emissions. > AusLink has provided significant funding for upgrading the passenger and freight rail networks. The ARTC is currently upgrading the track and signalling on the North Coast Line. > BASIX and other energy and resource conservation mechanisms introduced.
Impacts on landscape	<ul style="list-style-type: none"> > Minimise new area clearance and earthworks through road design and route selection. > Implement or develop landscape strategies, particularly north of Ballina. > Develop urban design strategies. 	<ul style="list-style-type: none"> > <i>The Far North Coast Regional Strategy 2006-31</i> requires the protection of the scenic quality of the region including natural areas, attractive rural areas and areas adjacent to water bodies, headlands, skylines and escarpments. > The RTA has an overall urban design strategy for its projects, which are implemented for the proposed upgrade. > Impacts on natural or rural landscape values were assessed as part of the project. Impact assessments and management measures would be implemented to reduce impacts.
Loss of agricultural land	<ul style="list-style-type: none"> > Avoidance of prime land through route selection and design. Develop strategies at project level that minimise impacts on rural land viability. > Investigate planning controls that minimise effects on prime agricultural land. 	<ul style="list-style-type: none"> > The options processes for individual RTA projects typically adopt indicators associated with prime agricultural land loss. Depending on the severity of impacts, management measures are devised and implemented as part of project assessments. > Controls incorporated at local government level as well by DoP through the <i>Far North Coast Regional Strategy 2006-31</i>.

Table 21.2 (cont)

Cumulative impact	Required management/action/response	Implementation and responsibility
Reduction in water quality and impacts on flooding (including effects of climate change on highway upgrades)	<ul style="list-style-type: none"> > Implementation of RTA Acid Sulfate Soil management guidelines and RTA Water Policy. > Implement water monitoring programs in support of other such measures. > Implement erosion and sedimentation control plans at project level. > Ensure provision of flood passage structures in design. > Implement residential development strategies which minimise effects of land clearing and runoff and limit water extraction. 	<ul style="list-style-type: none"> > Implementation of guidelines and policy are RTA standard procedures. > Water monitoring programs and erosion and sediment control are typical environmental management commitments made by the RTA at the project level where relevant (and have been implemented for the proposed upgrade). > Flood passage is a standard RTA design procedure. Flooding assessment was completed for proposed upgrade. > Residential impacts are controlled through local planning instruments and development application reviews, as well as by the DoP for any major development.
Reduction in townscape and heritage values	<ul style="list-style-type: none"> > Implement controls to maintain townscape and heritage values. 	<ul style="list-style-type: none"> > The options processes for individual RTA projects typically adopt indicators associated with heritage areas. > Planning agencies are responsible for other development controls. > Proposed upgrade has a high level of flood immunity and would not be expected to be affected by climate change.
Increased costs for provision of services due to induced development	<ul style="list-style-type: none"> > Investigate options for assistance to local government, service and utility providers to bring forward provision of services. 	<ul style="list-style-type: none"> > The master planning process at the NSW Government level has included wide consultation and publication to ensure all relevant parties are informed. The specific requirements are to be determined by each utility provider in accordance with current business planning practices. > The RTA is managing this issue through consultation with other government departments and utility providers.

21.3 Integration of the program and proposed upgrade with principles of ecologically sustainable development

Ecologically sustainable development aims to sustain and conserve natural resources through 'using, conserving and enhancing the communities' resources so that the ecological processes, on which life depends, are maintained and the total quality of life, now and in the future, can be increased (Commonwealth Government of Australia, 1990).

The principles of ecologically sustainable development have been an integral consideration throughout the process of developing the proposed upgrade and assessing its benefits and impacts. In addition, the preparation and exhibition of the environmental assessment in itself contributes to the consideration of the principles of ecologically sustainable development. It makes detailed information about the proposed upgrade publicly available and assists in the decision on whether the proposed upgrade should proceed.

Definitions of the four principles of ecologically sustainable development quoted below are from the *Protection of the Environment Administration Act 1991*. The definitions from this act are cross referenced in the *Environmental Planning and Assessment Act 1979*.

Precautionary principle

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.

In the application of the precautionary principle, public and private decisions should be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and;
- (ii) an assessment of the risk-weighted consequences of various options.

Intergenerational equity

The present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations

Conservation of biological diversity

Conservation of biological diversity and ecological integrity should be a fundamental consideration.

Improved valuation, pricing and incentive mechanisms

Environmental factors should be included in the valuation of assets and services, such as:

- (i) *polluter pays* - that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
- (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
- (iii) environmental goals, having been established, should be pursued in the most cost

effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

The ways in which the Pacific Highway Upgrade Program as a whole, and the proposed upgrade respond to the principles of ecologically sustainable development are summarised in **Table 21.3** below.

Table 21.3 - Application of ecologically sustainable development principles to the program and proposed project

Relevant ecologically sustainable development principles	Program approach	Project approach
Precautionary principle	Early strategic assessment. Use of best available technical information and adoption of best practice environmental standards, goals and measures to minimise environmental risks.	Environmental risk analysis prepared at project application phase and updated in this environmental assessment. Conservative, "worst case" scenarios addressed in impact assessment. Best practice measures are included in the management measures proposed in Part C of this environmental assessment and incorporated into the draft Statement of Commitments in Appendix C.
Inter-generational equity	The decision to upgrade the Pacific Highway has integrated long and short-term economic, environmental, land use and social (including social equity) considerations, so that any foreseeable impacts are not left to be addressed by further generations.	Issues that have potential long-term implications, such as consumption of non-renewable resources, waste disposal, greenhouse emissions, removal of vegetation and impacts on visual amenity and water quality, have been avoided and minimised as much as possible through route/ concept selection and application of management measures such as best practice water quality management and a comprehensive urban and landscape design strategy (see Part C and Appendix C).
Conservation of biological diversity	Recognition in the program of the rich biological environment of the North Coast of NSW and the need to avoid and control potential impacts throughout the length of the upgrade (e.g. through selection of which sections to upgrade).	The route/concept selection and design development have sought to avoid and minimise biodiversity impacts as much as possible. Riparian restoration would be undertaken as part of the proposed upgrade, while the landscape strategy includes biodiversity objectives.
Improved valuation, pricing and incentive mechanisms	Environmental and social costs/ benefits considered alongside economic and financial costs/ benefits in the decision to upgrade the Pacific Highway and in the selection of the highway sections to upgrade.	Environmental and social issues were considered in the strategic planning and establishment of the need for the project, and in the consideration of options. The value placed on these resources is evident in the extent of the planning, environmental investigations and design of management measures.

21.4 Relationship between the proposed upgrade and the objects of the Environmental Planning and Assessment Act 1979

The ways that the proposed upgrade would meet the objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act) are outlined in **Table 21.4** below.

Table 21.4 - Performance of the proposed upgrade against the objects of the EP&A Act.

EP&A Act objectives	Performance of Proposed Upgrade
(a) To encourage	
(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,	<p>The proposed upgrade and associated mitigation and management measures detailed in the Environmental Assessment allow for the proper management of these issues. For discussion of:</p> <ul style="list-style-type: none"> > Agricultural land, see Chapter 14. > Natural areas, see Chapter 12. > Forests, see Chapter 12 for natural forests; no forestry industry would be affected. > Minerals – no active mineral extraction would be affected. > Water, see Chapters 9 and 10. > Cities, towns and villages, see Chapters 14 and 17).
(ii) the promotion and co-ordination of the orderly and economic use and development of land,	The development of the proposed upgrade is anticipated to have significant economic benefits for the region, and for the movement of freight. No substantial adverse impacts on local businesses are expected (see Chapter 17).
(iii) the protection, provision and co-ordination of communication and utility services,	Utilities affected by the proposed upgrade would be relocated and/or protected as described in Section 5.14.
(iv) the provision of land for public purposes,	The proposed upgrade itself is proposed for a public purpose. No land reserved for public recreation would be affected.
(v) the provision and co-ordination of community services and facilities,	No community facilities occur within the proposed road reserve. Access to community facilities would be maintained, but altered in certain cases.
(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats,	Protection of threatened species, populations and ecological communities, and their habitats is described in Chapter 12.
(vii) ecologically sustainable development, and	Achievement of the principles of ESD was a key design principle for the proposed upgrade. This is described in Table 21.3.
(viii) the provision and maintenance of affordable housing.	The proposed upgrade is unlikely to influence the provision and maintenance of affordable housing in the area.

Table 21.4 (cont)

EP&A Act objectives	Performance of Proposed Upgrade
(b) To promote the sharing of the responsibility for environmental planning between the different levels of government in the State.	This is a high level objective that does not apply specifically to individual projects. While the Minister for Planning would determine the project application under Part 3A, Ballina and Byron shires have been consulted extensively throughout the route selection and environmental assessment process.
(c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.	Community involvement in the planning and assessment of the proposed upgrade is described in Chapter 4.