

The environmental assessment process for the Proposal under both Commonwealth and NSW legislation is described in this chapter. The statutory approvals required for construction of the Proposal are also provided.

2.1 Commonwealth requirements

2.1.1 The Commonwealth environmental assessment process

The Commonwealth environmental assessment process is conducted under the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act provides protection for matters of National Environmental Significance (NES), which are:

- World Heritage properties
- National heritage places
- Ramsar wetlands of international importance
- nationally listed threatened species and communities
- migratory species protected under international agreements
- nuclear actions
- Commonwealth marine environment
- any additional matters specified by regulation (after consultation with the States).

In addition, actions that may have a significant impact on Commonwealth land require approval.

Under Part 6 of the EPBC Act, if the proponent of a project considers that the proposed action may have a significant impact on a matter of national environmental significance then that person must refer the proposal to the Commonwealth Minister for a determination as to whether or not it will have such an effect. If the Minister forms the opinion that the project will have a significant impact, then the project requires the Minister's approval.

Under Part 8 of this Act, the Commonwealth Environment Minister can decide on the assessment approach to be adopted in the absence of a relevant bilateral agreement or Ministerial declaration. Five different types of assessment approach can be adopted:

- preliminary documentation
- Public Environment Report (PER)
- EIS
- public inquiry
- an accredited assessment process.

In assessing the impact of the Proposal under the EPBC Act, impacts on matters of NES are summarised in Table 2-1. As discussed in Chapter 10, 17 species and/or migratory species listed under the EPBC Act are relevant to the study area but would not be impacted in any significant manner by the Proposal. No Ramsar wetlands or areas of Commonwealth marine environment would be impacted by the Proposal. In addition, the Proposal does not involve any nuclear actions and would not impact on any Commonwealth marine environments or any additional matter specified by regulation. No Commonwealth land would be affected by the Proposal.

As a result, no referral under the EPBC Act by the RTA as proponent to the Minister for Environment and Heritage is necessary and, as a result, the Commonwealth does not have a role in approval of the Proposal.

Table 2-1 Impacts of the Proposal on matters of National Environmental Significance

Matter of National Environmental Significance	Areas Identified	Impact Determination	Relevant sections of EIS
World Heritage properties (as identified under the EPBC Act)	None	None	15.3.3
Ramsar wetlands of international importance	None	None	10.3
Nationally threatened species and ecological communities	None	None	10.2 and 10.3.3
Migratory species protected under international agreements	None	None	10.3
Nuclear actions	None	None	2.1.1
Commonwealth marine environment	None	None	2.1.1
Any additional matters specified by regulation	None	None	2.1.1

2.1.2 Other relevant Commonwealth legislation and policies

In addition to the EPBC Act, there are several other Commonwealth statutes or policies that need to be considered in relation to the Proposal. These are:

Environment and Heritage Legislation Amendment Act (No. 1) 2003

Australian Heritage Council Act 2003

Australian Heritage Council (Consequential and Transitional Provisions) Act 2003

The three Acts replace the previous Commonwealth heritage regime under the *Australian Heritage Commission Act 1975* and establish the following provisions:

- the National Heritage List - a schedule of places which the Minister for the Environment and Heritage considers to have 'National Heritage Value' based on prescribed 'National Heritage Criteria'
- the Commonwealth Heritage List – a schedule of places owned or controlled by the Commonwealth, which the Minister for the Environment and Heritage considers to have 'Commonwealth Heritage Value'
- the Australian Heritage Council - provides expert advice to the Minister for the Environment and Heritage on heritage issues and nominations for the listing of places on the National Heritage List and the Commonwealth Heritage List
- the Register of the National Estate – a register of 'those places, being components of the natural environment of Australia or the cultural environment of Australia, that have aesthetic, historic, scientific or social significance or other special value for future generations as well as for the present community'.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The Act provides for the protection of areas and objects that are of significance to Aboriginal people in accordance with Aboriginal tradition. The Act allows Indigenous Australians to apply to the Minister for Immigration and Multicultural and Indigenous Affairs to seek protection for significant Aboriginal areas and objects.

Native Title Act 1993

The main purpose of the Act is to recognise and protect native title, which can be defined as the 'rights and interests in land and waters that Aboriginal and Torres Strait Islander people have under laws and customs and that are recognised by the common law' (s.223). The traditions of Aboriginal and Torres Strait Islander peoples can change with time and sometimes people stop following a tradition. Therefore, the Act states that native title rights can change or even finish.

The Act contains a process for determining whether native title exists, what rights and interests native title holders have, and whether people who have title have 'exclusive possession' (s.13, s.61 and s.225).

Wetlands Policy of the Commonwealth Government of Australia (January 1997)

This policy contains a goal, objectives and a number of guiding principles that provide specific direction for the Commonwealth's actions that directly or indirectly affect wetlands. The objectives and principles recognise the international importance of wetlands and serve to ensure that there is a consistent approach to wetlands management by all Commonwealth organisations with responsibilities in this area. The Commonwealth is a signatory to several international treaties relating to wetlands and must ensure that its obligations under these treaties are met.

The Policy has six strategies to provide for the conservation, repair and wise use of wetlands, namely:

- managing wetlands on Commonwealth lands and waters
- implementing Commonwealth policies and legislation and delivering Commonwealth programs
- involving the Australian people in wetlands management
- working in partnership with State/Territory and Local Governments
- ensuring a sound scientific basis for policy and management
- international actions.

Since no wetland would be directly or indirectly impacted by the Proposal, this policy is not relevant to the Proposal.

2.2 New South Wales environmental assessment process

The NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* provide the statutory context for assessment of the upgrading of the Pacific Highway between Moorland and Herons Creek. The Proposal is being assessed in accordance with the provisions under Part 5 of the EP&A Act and is subject to approval from the Minister for Infrastructure and Planning.

The EP&A Act is supplemented by a number of Environmental Planning Instruments (EPIs), namely State Environmental Planning Policies (SEPPs), Regional Environmental Plans (REPs) and Local Environmental Plans (LEPs). Relevant EPIs made under the EP&A Act and applicable to the development of the Proposal are described below.

Figure 2-1 illustrates the environmental determination and assessment process as applicable to this Proposal under Part 5 of the EP&A Act.

MOORLAND TO HERONS CREEK EIS
 2 Environmental determination and approvals process

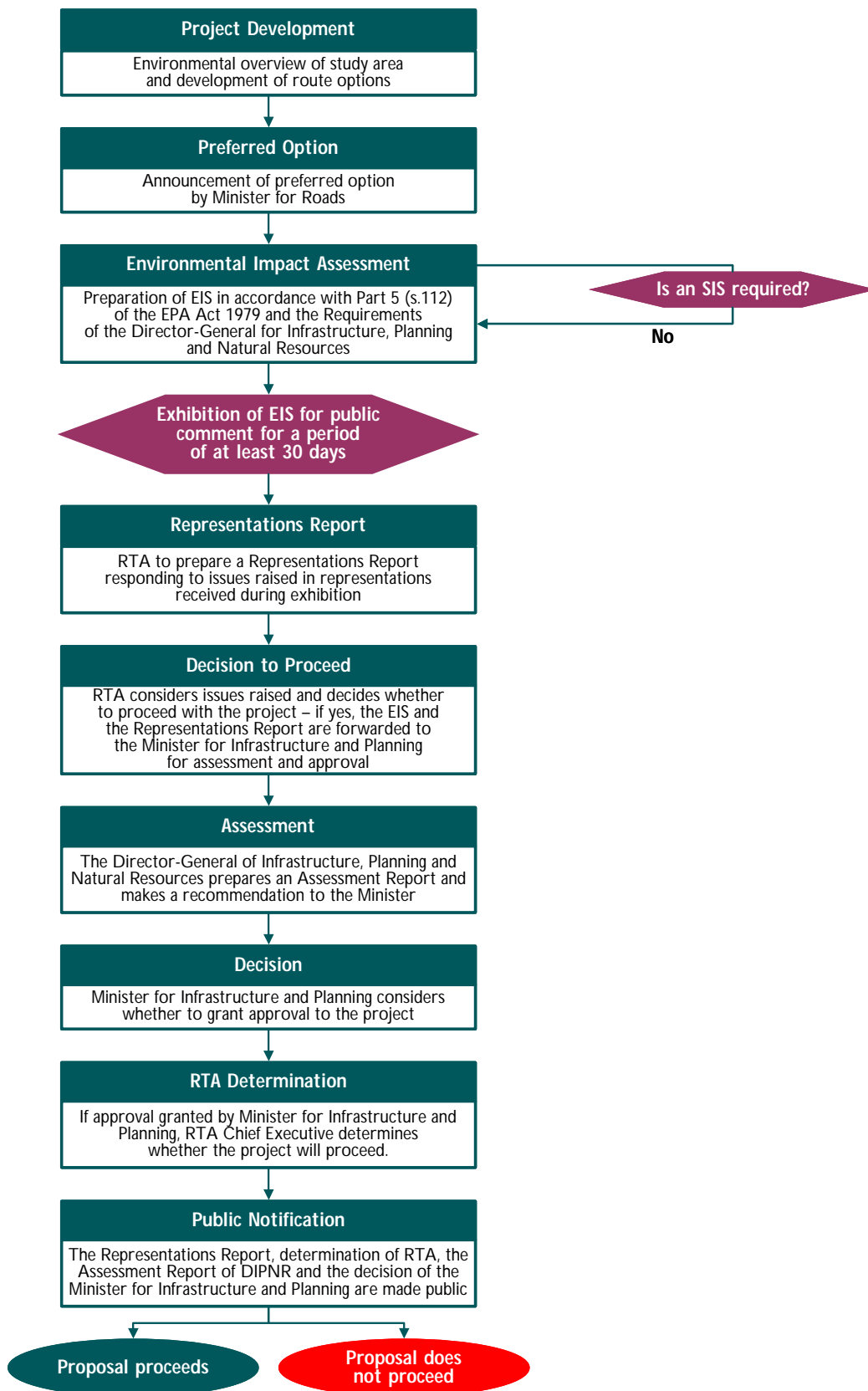


Figure 2-1 Environmental assessment and determination process

2.2.1 Assessment under Part 5 of the EP&A Act

Under the provisions of *State Environmental Planning Policy No. 4 - Development Without Consent and Miscellaneous Exempt and Complying Development* (SEPP 4), development for the purposes of classified roads or proposed classified roads (as defined by the *Roads Act 1993*) is exempt from the need to obtain development consent. The proposed Moorland to Herons Creek Pacific Highway upgrade, as a classified road, is subject to the environmental assessment process under Part 5 of the EP&A Act.

The RTA, as the proponent and nominated determining authority, is required to assess the impact of the Proposal on the environment in accordance with s.111 of the EP&A Act, i.e. 'to take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity'. Under s.112 of the EP&A Act, an EIS is to be prepared when a proposed activity is likely to have a significant impact on the environment. In its consideration of Proposal, the RTA concluded that the likely environmental impacts of the Proposal had the potential to be significant. Accordingly, the RTA resolved to prepare an EIS and sought the requirements of the then Director-General of Planning (now Director-General of Infrastructure, Planning and Natural Resources) (see Appendix A). The Director-General's Requirements for this EIS were issued to RTA on 13 May 2002, approximately eighteen months after the announcement of the Proposal, and confirmed by the Department of Infrastructure, Planning and Natural Resources (DIPNR) as still applicable on 8 June 2004.

This EIS has been prepared and will be exhibited in accordance with the provisions of the EP&A Act and the Regulations. The EIS will be placed on public exhibition for at least the statutory minimum period of 30 days. Under s.115A of the EP&A Act, the proposal requires the approval of the Minister for Infrastructure and Planning and then determination by the Chief Executive of the RTA.

Determination of the proposal

Following public exhibition of the EIS, the RTA will forward copies of all public submissions to DIPNR. The RTA will consider the EIS, Working Papers, all public representations and any other relevant matter and then prepare a Representations Report. The RTA may wish to modify the Proposal at this stage to reduce or eliminate potential environmental impact. If the Chief Executive of the RTA, acting on advice, wishes to proceed with the Proposal, the Representations Report will be forwarded to DIPNR to seek the approval of the Minister for Infrastructure and Planning.

DIPNR will review the EIS, Working Papers, all representations, and the RTA's Representations Report. An Assessment Report will be prepared by the Director-General of DIPNR and, acting on that report and after consultation with the Minister for Roads, the Minister for Infrastructure and Planning will decide whether to approve the Proposal. The Minister for Infrastructure and Planning may attach conditions to the project approval. If approval is granted, the Chief Executive of the RTA will determine if the Proposal will proceed.

Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995* (TSC Act) modified the EP&A Act by including in s.5A eight factors to be considered when determining 'whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats'. These factors must be taken into account by a consent authority or determining authority when considering a Development Application (DA) or a development proposal pursuant to s.78, s.79C and s.112 of the EP&A Act. Schedules 1 and 2 of the TSC Act list species that are considered to be endangered or vulnerable respectively.

During the flora and fauna investigations for the Proposal, particular attention was given to threatened flora and fauna species known to occur in the locality or general region. Fifteen threatened plant species and twenty-seven threatened fauna species were determined to be present or have the potential to be present in the study area and a s.5A 'assessment of

significance' (Eight Part Test) was undertaken as required under the EP&A and TSC Acts (see Section 10.4). None of these species were located in the areas protected under *State Environmental Protection Policy No. 14 – Coastal Wetlands* (SEPP 14) that lie adjacent to the north-eastern section of the Proposal.

This assessment concluded that the Proposal is unlikely to have a significant impact on any species as listed under the TSC Act (see Chapter 10). Impact amelioration and environmental management measures would be implemented during the development of the Proposal to mitigate the potential for environmental harm on any threatened biota and their habitats in the immediate vicinity of the Proposal.

State Environmental Planning Policy No. 44 - Koala Habitat Protection

State Environmental Planning Policy No. 44 - Koala Habitat Protection (SEPP 44) encourages the

...proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:

- by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat
- by encouraging the identification of areas of core koala habitat
- by encouraging the inclusion of areas of core koala habitat in environment protection zones.

SEPP 44 applies to land within the LGAs listed under Schedule 1 of the SEPP, including both Greater Taree and Hastings LGAs. It requires the assessment of whether land to which it applies is 'potential koala habitat' or 'core koala habitat'. However, Clause 6 of the SEPP states that Part 2 - Development Control of Koala Habitats of the SEPP applies only to land 'in relation to which a DA has been made'. The Proposal does not involve the submission of a DA as it is subject to the assessment under Part 5 of the EP&A Act and, therefore, Part 2 of SEPP 44 does not apply to the Proposal. The RTA in this instance is the determining authority and, whilst there is no legal requirement to consider the provisions of SEPP 44, this EIS does assess koalas under the provisions of the TSC Act (see Section 10.4).

Previous records and the presence of Koala feed tree species such as Tallowwood (*Eucalyptus microcorys*) indicate that Koala habitat occurs along the length of the Proposal. However, the presence of Koala feed trees occurs only in relatively high densities near part of the proposed Kew bypass north of Ocean Drive. Under SEPP 44, the potential Koala habitat is defined as areas of native vegetation where the tree types listed in Schedule 2 (Koala feed trees) constitute at least 15% of the total number of trees in the upper or lower strata of the tree component. Under this definition, the area north of Ocean Drive cannot be considered potential Koala habitat and, as such, any modification of this vegetation is unlikely to impact this species.

Notwithstanding this, the presence of koalas in the vicinity of the Proposal is acknowledged (see Section 10.3). Appropriate measures to contribute to the conservation of this species in the vicinity, both during the construction period and subsequent operational period, have been incorporated into the Proposal design (see Chapter 6).

State Environmental Planning Policy No. 14 – Coastal Wetlands

State Environmental Planning Policy No. 14 – Coastal Wetlands (SEPP 14) provides a framework for the preservation and protection of coastal wetlands in NSW. The policy lists clearing, draining or filling and the construction of a levee on gazetted coastal wetlands a 'designated development'. Such development proposed on any gazetted wetland will require development consent from the relevant local council and the concurrence of the Director-General of DIPNR.

When considering whether to grant consent, the Director-General takes into account, together with other considerations, issues such as:

- the environmental effects of the proposed development
- the adequacy of safeguards and rehabilitation measures proposed or installed
- whether consideration has been given to any feasible alternative
- any surrounding wetlands affected by the proposed development and appropriateness of improving conditions requiring the carrying out of works to preserve or enhance the value of those surrounding wetlands.

A number of SEPP 14 Wetlands (Nos 544a, 544b, 544c, 542, 542a, 542b, and 542c) occur within the study area to the east of the Proposal and are predominantly located adjacent to the Camden Haven River estuary and Watson Taylors Lake. Two SEPP 14 Wetlands, No. 544a (Sunnyvale Swamp) and No. 544c (Kew Swamp), lie to the north of the Camden Haven River, directly east of and adjacent to the route of the Proposal. These wetlands contain a range of important habitat resources for a variety of species, including threatened amphibian and bird species.

The route of the Proposal avoids direct contact or impact on either of these wetlands and, as such, the Proposal is not classified as 'designated development' under s.29 of the EP&A Act.

State Environmental Planning Policy No. 26 – Littoral Rainforests

State Environmental Planning Policy No. 26 – Littoral Rainforests (SEPP 26) provides a mechanism for the protection of littoral rainforests in low-lying coastal locations.

There are no littoral rainforests protected by SEPP 26 that exist within the study area and, therefore, the provisions of SEPP 26 do not apply to this Proposal.

2.2.2 Assessment under the *Fisheries Management Amendment Act 1997*

Under this Act, the RTA is required to assess the potential impact of the Proposal on threatened species, populations and ecological communities of fish or marine vegetation. The Act requires a permit to be sought from the Minister for Primary Industries in relation to any activity likely to cause harm to protected areas (public water land, aquaculture lease or marine vegetation).

The aquatic investigations carried out for this Proposal included consideration of threatened species listed under this legislation. No species currently listed on the threatened species schedules of the *Fisheries Management Act 1994* were recorded during the site surveys (see Chapter 11).

2.2.3 Other relevant State legislation and policies

National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (as amended) provides the primary basis for the legal protection and management of Aboriginal sites within NSW. The implementation of the Aboriginal heritage provisions of the Act is the responsibility of Department of Environment and Conservation (DEC).

The Act aims to prevent the unnecessary or unwarranted destruction of relics, and the active protection and conservation of relics that are of high cultural significance. Generally, it is an offence to disturb or to excavate any land for the purpose of discovering, disturbing or moving a relic without the written consent of the Director-General of DEC. Consents regarding the use or destruction of relics are managed through a DEC permit system. The issuing of permits is dependent upon archaeological review and assessment and liaison with the Aboriginal community.

The cultural heritage assessment in relation to Aboriginal heritage resources located within the study area as presented in Chapter 15 and Working Paper No. 5 was undertaken with regard to the relevant provisions of this Act.

Heritage Act 1977

The purpose of the *Heritage Act 1977* is to ensure that the heritage of NSW is adequately identified and conserved. The Act is concerned with all aspects of conservation ranging from the most basic protection against damage and demolition to restoration and enhancement. It recognises two levels of heritage significance - State significance and Local significance - across a broad range of values.

The cultural heritage assessment in relation to Aboriginal and European heritage resources located within the study area as presented in Chapter 15 and Working Paper No. 5 was undertaken with regard to the relevant provisions of this Act.

NSW Aboriginal Land Rights Act 1983

This Act recognises that land in NSW was traditionally owned and lived on by Indigenous Australians and that land is particularly important for spiritual, social, cultural and economic reasons. The Act was designed to give control over land, where possible, to local Aboriginal communities.

There would be compliance with relevant provisions of this Act as may apply to any land required for the Proposal.

2.3 Other statutory approvals

Subject to determination and if the RTA decides to proceed with construction of the Proposal, the RTA and/or its contractors would need to obtain approvals and licences under a number of other State statutes and policies as noted in Table 2–2. These approvals and licences would be required to regulate and monitor the performance of the proposal both during the construction and operational stages.

Table 2–2 Statutory approvals required for construction of the upgrading of the Pacific Highway between Moorland and Herons Creek

Legislation (responsible agency)	Relevant provisions	Approval required
<i>Crown Lands Act 1898</i> (Department of Environment and Conservation)	The objective of this Act to ensure that Crown land is managed for the benefit of the people of New South Wales, in particular the conditions under which Crown land is permitted to be occupied, used, sold, leased, licensed or otherwise dealt with.	Lease or licence for construction of the road across Crown Land and the Camden Haven River.
<i>Environmental Planning and Assessment Act 1979</i> (Department of Infrastructure, Planning and Natural Resources)	The objective of this Act is to encourage the proper management, development and conservation of natural and artificial resources for the purpose of promoting the social and economic welfare of the community and a better environment as well as ecologically sustainable development.	Compliance with conditions included in the approval by the Minister for Infrastructure and Planning. Amendments to zoning of road reserve.

Legislation (responsible agency)	Relevant provisions	Approval required
<i>Environmentally Hazardous Chemicals Act 1985</i> (Department of Environment and Conservation)	The purpose of this Act is to control the use of environmentally hazardous chemicals and declared chemical waste.	Licence for keeping of certain chemicals (as notified by DEC).
<i>Fisheries Management Act 1994</i> (FM Act); <i>Fisheries Management Amendment Act 1997</i> (FMA Act) (Department of Primary Industries)	The objectives of the FM Act are to conserve, develop and share the fisheries resources of the State for the benefit of present and future generations. The FMA Act amends the FM Act particularly with regard to the conservation of fish and marine vegetation.	Determine whether the activity is likely to significantly affect threatened species. If it is likely, the Eight Point Test as defined in s.5A of the EP&A Act is required. Notification is required of any dredging or reclamation in any waters in NSW under s.199. Under s.219, a permit is required prior to construction if the passage of fish is obstructed. A permit under s.205 is also required for the damage of mangroves, seagrass and macroalgae.
<i>Forestry Act 1916</i> (NSW Forests)	The main objective of this Act is the management of timber production on areas of Crown land under the control of NSW Forests consistent with conservation obligations under the Act.	Amendment to the boundaries of Middle Brother State Forest and transfer of land to RTA should Forests estate land be required.
<i>Heritage Act 1977</i> (Heritage Council of NSW)	The purpose of the Act is to ensure that non-Aboriginal cultural heritage in NSW is adequately identified and conserved.	Approval to discover, expose or move a relic under s.139.
<i>National Parks and Wildlife Act 1974</i> (Department of Environment and Conservation)	The Act aims to prevent the unnecessary or unwarranted destruction of relics and the active protection and conservation of relics of high cultural significance. This Act covers relics of both 'indigenous and non-European' habitation in NSW. The Act also guides the management of conservation areas including Nature Reserves, particularly the protection of vegetation and native fauna.	Consent (i.e. Consent to Destroy permit) is required to disturb or destroy any archaeological sites or remains under s.90. Preliminary research permit for any potential archaeological deposits under s.87.
<i>Native Vegetation Conservation Act 1997</i> (Department of Infrastructure, Planning and Natural Resources)	The Act protects State protected land and native vegetation that is identified by the Minister for Natural Resources.	RTA/contractor would need to obtain development consent from the Minister for Natural Resources for clearing of native vegetation or lopping of any tree on State protected land. Under s.88 of the <i>Roads Act</i> , if the area to be cleared is a public road prior to clearing, it is exempt.
<i>Navigation Act 1901</i> (NSW Waterways)	The Act controls navigable waters in NSW.	Approval of development of the proposed bridge across the Camden Haven River, which is identified as a navigable water.

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Legislation (responsible agency)	Relevant provisions	Approval required
<i>Protection of the Environment Operations Act 1997</i> (POE Act) (Department of Environment and Conservation)	<p>The objectives of this Act include to protect, restore and enhance the quality of the environment in the context of ESD and to reduce risks to human health and prevent degradation of the environment.</p> <p>The Proposal is listed as a scheduled activity under Schedule 1 of the POEO Act under the category 'freeway or tollway construction'.</p>	<p>RTA/contractor compliance with the provisions of the Act in relation to pollution control during construction.</p> <p>The Proposal, where a 'scheduled activity', will require an Environment Protection Licence. Scheduled activities potentially relevant to the highway upgrade include bitumen pre-mix and hot mix industries; concrete works; and crushing, grinding or separating works.</p>
<i>Rural Fires Act 1997</i> (NSW Fire Service)	Proposal is subject to the <i>Rural Fires Act 1997</i> .	<p>The preparation of a bush fire risk management plan for the local area affected.</p> <p>The RTA is to indicate those measures to be implemented to ensure road verges are maintained to prevent the occurrence on and spread of fire from the road corridor.</p>
<i>Threatened Species Conservation Act 1995</i> (Department of Environment and Conservation)	This Act aims to conserve threatened species, populations and ecological communities of animals and plants.	Provided appropriate mitigation measures are implemented, no significant impacts on protected flora and fauna species are likely as a result of the Proposal, so a licence under s.92 of the Act would not be required.
<i>Waste Avoidance and Resource Recovery Act 2001</i> (Department of Environment and Conservation)	The objective of the Act is to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ESD and to establish a waste management hierarchy of avoidance of unnecessary resource consumption, resource recovery (including re-use, recycling, reprocessing, energy recovery and disposal).	<p>RTA/contractor would be required to comply with the Act in relation to waste management during construction.</p> <p>Licences are required for generating or storing certain hazardous wastes, including those within the contractor's site compound and at concrete batching plants.</p>
<i>Water Management Act 2000</i> (Department of Infrastructure, Planning and Natural Resources)	The Act requires licences to be obtained for extraction of water or for the realignment of stream beds.	<p>RTA/contractor to obtain licence for the extraction of any water for dust control or compaction or for stream realignment for culvert insertion or bridge construction.</p> <p>The RTA would require a licence for earthworks within 40m of a watercourse. It replaces the licensing, approvals and provisions of the <i>Water Act 1912</i> and the <i>Rivers and Foreshore Improvement Act 1948</i>.</p>

2.4 Assessing the principles of Ecologically Sustainable Development

2.4.1 Definition of ESD

In recent times, the sustainability of human activities has become an issue at the forefront of the environmental debate. Ecologically Sustainable Development (ESD), as defined in the 1990 Ecologically Sustainable Development: Commonwealth Discussion Paper, is:

...using, conserving and enhancing the community's resources so that ecological processes on which life depends are maintained and the total quality of life, now and in the future, can be increased.

In broad terms, ESD aims to sustain and conserve natural resources. ESD principles must be considered in the planning and managing of transport systems within Australia. This is reflected in giving consideration to environmental resources on which it is often difficult to place monetary values such as air, flora, fauna, hydrology, soil and public health.

The EP&A Regulation 2000, Schedule 2, defines the principles of ESD as:

- a) the precautionary principle—namely, that 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.
- b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.
- c) conservation of biological diversity and ecological integrity—namely that conservation of biological diversity and ecological integrity should be a fundamental consideration.
- d) improved valuation, pricing and incentive mechanisms—namely, that 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 and abatement,
 - ii) the users of goods and services should pay prices based on the full life cycle 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.

These ESD principles have been recognised as part of the environmental assessment process and are discussed throughout the Proposal EIS.

2.4.2 *National Strategy for ESD*

The *National Strategy for ESD* (Commonwealth Government of Australia 1992) also provides guidance as to what should be addressed when considering the ecological sustainability of a proposed development. The *National Strategy for ESD* lists three core objectives and seven guiding principles to be considered in a balanced approach. The core objectives are:

- to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations

- to provide for equity within and between generations
- to protect biological diversity and maintain essential ecological processes and life-support systems.

The Proposal aims to achieve the principles of ESD. Aspects of the Proposal outlined below relate specifically to the guidelines of the *National Strategy for ESD*.

- Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equity considerations:
 - The decision-making process is undertaken as part of the EP&A Act. This process gives consideration to local, regional and national issues and short and long term issues. This process has been agreed at State and Commonwealth Government levels.
 - Consultation throughout the study has involved Government agencies, local interest groups, local businesses and residents.
 - The concept design for the Proposal is based on minimising vegetation loss.
 - The Proposal would upgrade travelling conditions for all vehicles therefore decreasing the likelihood of accidents involving the transport of dangerous goods.
 - The design, construction and maintenance of the Proposal would aim for longevity of the road pavement and associated infrastructure.
- Where 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:
 - The strict adherence to the environmental management plan would ensure minimal degradation of the surrounding environment.
- The global dimension of environmental impacts of actions and policies should be recognised and considered:
 - Biological diversity would be maintained with the operation of the Proposal. A flora and fauna assessment has been undertaken to consider the impact of the Proposal. The EIS outlines specific actions required to ensure that flora and fauna species in the area will not be significantly affected. The Proposal does not threaten the existence of any species or communities of flora or fauna.
 - The planting or seeding of local native flora species would be undertaken, which would contribute to preserving biological diversity of both flora and fauna.
 - A decrease in vehicle emissions due to improved road conditions and therefore a reduction of the Greenhouse effect and increased energy savings compared to the 'do-nothing' option.
- Decisions and actions should provide for broad community involvement on issues that affect them:
 - The preparation of the EIS included extensive community consultation with the road design being tailored to have regard to the views of local residents. The consultation process included community focus groups, public meetings, written communication, community newsletters, and project website.
- The need to develop a strong, growing and diversified economy that can enhance the capacity for environmental protection should be recognised:
 - The Proposal would provide the 'missing link' of dual carriageway of the Pacific Highway between Taree and the Hastings River (Port Macquarie), enhancing the road link between the major population centres of Sydney and Brisbane.

- The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised:
 - The Proposal would improve commercial vehicle access between Sydney and Brisbane by reducing operating costs and travel times.
- Cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms:
 - A road user cost benefit analysis was undertaken as part of this EIS. Environmental considerations were not included as part of that analysis although these have been considered by qualitative methods and expert assessment.

The core objectives of ESD have been considered throughout the environmental assessment process from the consideration of route options to the detailed assessments of all specialist environmental studies undertaken during the preparation of the EIS. The EIS is a public document that allows community discussion on the Proposal and whether it should proceed. The EIS details all necessary mitigation measures that would ensure the four principles of ESD are maintained.