



Transport
Roads & Maritime
Services

ENVIRONMENTAL ASSESSMENT AND DECISION-MAKING BY NSW ROADS AND MARITIME SERVICES

**STRATEGIC ASSESSMENT – UNDER PART 10, ENVIRONMENT
PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999**

Program Report - FINAL

MAY 2015

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Roads and Maritime Services

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*Strategic Assessment – under Part 10, Environment Protection and
Biodiversity Conservation Act 1999*

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Glossary of terms and abbreviations

Term	Meaning
CEMP	Construction Environmental Management Plan
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EPBC Act	Australian Government <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EP&A Act	NSW <i>Environmental Planning & Assessment Act 1979</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
ESR	Environmental Site Representatives
FM Act	NSW <i>Fisheries Management Act 1994</i>
MNES	Matters of National Environmental Significance
MoU	Memorandum of Understanding
Program	Roads and Maritime commitments for environmental assessment and subsequent decision-making under Part 5 of the EP&A Act
REF	Review of Environmental Factors
Roads and Maritime	Roads and Maritime Services NSW
SIS	Species Impact Statement
SMARTA	Specific, Measurable, Achievable, Realistic, Time-driven and Auditable
Specified Protected Matters	Nationally listed threatened species and ecological communities protected by Sections 18 and 18A of the EPBC Act and listed migratory species protected by Sections 20 and 20A of the EPBC Act.
TSC Act	NSW <i>Threatened Species Conservation Act 1995</i>

Executive Summary

Introduction

The NSW and Australian Governments are working together to improve environmental impact assessment and decision making processes and to remove duplication.

In support of this commitment, Roads and Maritime Services NSW (Roads and Maritime) and the Australian Government Department of the Environment have entered into an agreement under Section 146 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The agreement provides for the undertaking of a strategic assessment of the impacts on Specified Protected Matters from implementing Roads and Maritime commitments for environmental assessment and subsequent decision-making (the Program).

A strategic assessment can be undertaken at a plan, policy or program level. In this case the strategic assessment is of Roads and Maritime's commitments as they relate to the implementation of its guidelines and subsequent decision-making with respect to road and traffic management works assessed under Part 5 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

The strategic assessment comprises three key reports:

- **The Program Report** - this report
- **The Strategic Assessment Report** - provides a comprehensive assessment of the impact of the Program on Specified Protected Matters.
- **Supplementary Report** - outlines public comments on the draft Program Report and Strategic Assessment Report and demonstrates how those comments have been addressed.

The purpose of this report is to outline how the Program is aligned with the objectives of the EPBC Act, with respect to the Specified Protected Matters. In particular, this report:

- Describes the Program that constitutes the 'policy, plan or program' pursuant to Section 146 of the EPBC Act
- Outlines Roads and Maritime commitments and undertakings to ensure adequate protection of the Specified Protected Matters during implementation of the Program.

Benefits

The strategic assessment will improve efficiencies in decision-making by avoiding duplication while ensuring environmental assessment standards and protection are maintained. It will assist in timely delivery of projects supporting economic development and community access to employment, education and services. In addition, it will provide a single environmental assessment process, facilitating community awareness and engagement in decision-making.

The Program

The Program comprises Roads and Maritime's commitments with respect to environmental impact assessment and decision-making for road and traffic management activities assessed under Part 5 of the EP&A Act.

Throughout this report, Roads and Maritime has identified 14 commitments that make up the Program. These commitments, as they relate to the implementation of its guidelines and subsequent decision-making, relate broadly to the following:

- Ecologically sustainable development (Program commitment one)

- Protection hierarchy of ‘avoid, minimise, mitigate and offset’ (Program commitment two)
- Infrastructure lifecycle management approach (Program commitment three)
- Environmental impact assessment (Program commitment four)
- Biodiversity assessment (Program commitment five)
- Environment protection (Program commitment six)
- Community and stakeholder consultation (Program commitment seven)
- Decision-making (Program commitment eight)
- Environmental performance (Program commitment nine)
- Environmental inspections and auditing (Program commitment 10)
- Environmental monitoring (Program commitment 11)
- Incident management (Program commitment 12)
- Adaptive management (Program commitment 13)
- Education and training (Program commitment 14).

Key outcomes

The strategic assessment examines how Roads and Maritime's commitments with respect to environmental impact assessment and decision-making (the Program) for road and traffic management activities assessed under Part 5 of the EP&A Act address nationally listed threatened species, ecological communities and listed migratory species (the Specified Protected Matters). In effect, it considers the following question:

Will application of the Program ensure that robust processes are in place during the planning and assessment of road and traffic management activities to protect and avoid unacceptable impacts on the Specified Protected Matters?

The key outcomes intended to be delivered by the Program are summarised in the table below.

Key Program outcomes

Specified Protected Matter	Key outcomes
Listed threatened species and ecological communities	The survival and conservation status of listed threatened species and ecological communities will be promoted and enhanced, including through the conservation of critical habitat and other measures contained in any recovery plans, threat abatement plans or conservation advices.
Listed migratory species	The survival and conservation status of listed migratory species and their critical habitat will be promoted and enhanced.

Endorsement criteria

In deciding whether to endorse the Program, the Australian Government Environment Minister must be satisfied that the requirements of the EPBC Act have been met, that the Terms of Reference for the strategic assessment have been adequately addressed, and that any recommendations by the Minister to modify the Program have been responded to appropriately. The Australian Government Environment Minister may endorse the Program if satisfied that the Strategic Assessment Report adequately addresses the impacts of actions taken under the Program on the Specified Protected Matters.

Protection of nationally listed threatened species, communities and migratory species (the Specified Protected Matters) will be achieved by aligning the Roads and Maritime Program with the objects of the EPBC Act.

1 Introduction

1.1 Background

The NSW and Australian Governments are working together to improve environmental impact assessment and decision making processes and to remove duplication.

The Australian Government and NSW Roads and Maritime Services (Roads and Maritime) have entered into an agreement under Section 146 of the Australian Government *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to undertake a strategic assessment. This considers the impacts on nominated 'Specified Protected Matters' from implementing a Program comprising Roads and Maritime processes and commitments with respect to environmental assessment and decision-making for activities subject to Part 5 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

In the Section 146 Agreement for this strategic assessment, the Program is defined as 'guidelines for the application of Part 5 (excluding Part 5.1) of the EP&A Act, and subsequent decision-making, in relation to the undertaking of road and traffic management works by, or on behalf of, Roads and Maritime with regard to Specified Protected Matters'.

'Guidelines' for the application of Part 5 of the EP&A Act in relation to the undertaking of road and traffic management works, for the purposes of the strategic assessment, means a high level guide to the processes and commitments with respect to environmental assessment and decision-making.

These processes and commitments have been summarised and documented in the Program Report.

The Program is given practical effect by Roads and Maritime through the application of a range of policies and procedural guidelines.

For the purposes of the strategic assessment the Specified Protected Matters are:

- Nationally listed threatened species and ecological communities protected by Sections 18 and 18A of the EPBC Act
- Listed migratory species protected by Sections 20 and 20A of the EPBC Act.

This report provides a high level guide to the processes and commitments with respect to environmental assessment and decision-making for road activities subject to Part 5 of the EP&A Act. This report documents the Program for the purposes of the Section 146 Agreement between the Commonwealth of Australia and Roads and Maritime.

1.2 Strategic assessment process

Some road projects carried out by Roads and Maritime require environmental assessment under Part 5 of the EP&A Act and under the Australian Government EPBC Act. These are projects that are not classified to be of state significance under the EP&A Act. While these activities can vary in scale and cost, typical examples include: new overtaking lanes for existing roads; sections of new road, including duplications; bridge replacements; and safety works such as signage, fencing and road shoulder improvements.

The EPBC Act is triggered for a project proposed by Roads and Maritime when it is likely to have a significant impact on listed matters of national environmental significance. That includes impacts on the Specified Protected Matters noted above.

In practical terms, this means that the biodiversity impacts of a Roads and Maritime project may be assessed twice, but in separate processes conducted by different levels of government. This

duplication of effort is inefficient and can result in extended timeframes for decision-making on projects.

Strategic assessments under Part 10 of the EPBC Act provide a mechanism to avoid duplicative processes while ensuring that standards in environmental assessment and protection continue to be maintained. A strategic assessment occurs in two steps:

1. Assessment and endorsement of a 'policy, plan or program'
2. Approval of a class of actions associated with the policy, plan or program.

Following endorsement and approval, actions taken under the policy, plan or program may proceed without the need for further Australian Government approval.

Application to Roads and Maritime activities

The strategic assessment examines how Roads and Maritime processes and commitments with respect to environmental impact assessment and decision-making (the Program) for road and traffic management activities assessed under Part 5 of the EP&A Act address nationally listed threatened species, ecological communities and listed migratory species (the Specified Protected Matters). In effect, it considers the following question:

Will application of the Program ensure that robust processes are in place during the planning and assessment of road and traffic management activities to protect and avoid unacceptable impacts on the Specified Protected Matters?

If the strategic assessment is approved by the Australian Government Minister for the Environment, the outcome will be that Roads and Maritime activities currently assessed under Part 5 of the EP&A Act will no longer require separate Commonwealth approval.

1.3 Purpose and structure of this report

The purpose of the Program Report is to outline how the Program is aligned with the objectives of the EPBC Act, with respect to the Specified Protected Matters.

In particular, this report:

- Describes the Program that constitutes the 'policy, plan or program' pursuant to Section 146 of the EPBC Act
- Outlines Roads and Maritime commitments and undertakings to ensure adequate protection of the Specified Protected Matters during implementation of the Program.

The report is structured in four chapters:

- Chapter one (this Chapter) describes the endorsement criteria and expected outcomes for the Program; an overview of the roles and responsibilities of Roads and Maritime; a description of the activities subject to the Program; and a summary of existing legislative requirements with respect to the environmental assessment of those activities
- Chapter two describes the Program that constitutes the 'policy, plan or program' for the purposes of the strategic assessment. It outlines the Roads and Maritime commitments with respect to environmental assessment and decision making processes for activities subject to Part 5 of the EP&A Act, from the initiation phase of an activity through to development, implementation and finalisation, and how these address the Specified Protected Matters
- Chapters three and four discuss how the Program meets the objects of the EPBC Act. They also outline the Program commitments that will ensure that unacceptable or unsustainable impacts to the Specified Protected Matters do not occur

- Chapter five identifies how Roads and Maritime will assess the performance of the Program, including frameworks for evaluation and reporting.

A separate Strategic Assessment Report considers the likely impacts of implementing the commitments under the Program on the Specified Protected Matters.

1.4 Endorsement criteria

In deciding whether to endorse the Program, the Australian Government Minister for the Environment must be satisfied that the requirements of the EPBC Act have been met, that the Terms of Reference for the strategic assessment have been adequately addressed, and that any recommendations by the Minister to modify the Program have been responded to appropriately. The Environment Minister may endorse the Program if satisfied that the Strategic Assessment Report adequately addresses the impacts of actions taken under the Program on the Specified Protected Matters.

The Program makes provision for the protection of nationally listed threatened species, communities and migratory species (the Specified Protected Matters) by aligning environmental assessment and decision-making processes with the objects of the EPBC Act. Chapters 3 and 4 of this report summarises these provisions.

Box 1-1 EPBC Act objects

- | |
|---|
| <ul style="list-style-type: none"> a. Provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance b. Promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources c. Promote the conservation of biodiversity and provide for the protection and conservation of heritage d. Promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and Indigenous peoples e. Assist in the co-operative implementation of Australia's international environmental responsibilities f. Recognise the role of Indigenous peoples in the conservation and ecologically sustainable use of Australia's biodiversity g. Promote the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge. |
|---|

1.5 Roads and Maritime Services

1.5.1 *Role and responsibilities*

Roads and Maritime Services NSW (Roads and Maritime) is a NSW Government Agency established under the *Transport Administration Act 1988* (NSW). Roads and Maritime is part of Transport for NSW, which has overall responsibility for transport policy, planning and coordination functions, and the oversight of infrastructure delivery and asset management.

Within Transport for NSW, Roads and Maritime has specific responsibility for managing the operation of roads and waterways. Roads and Maritime designs and delivers initiatives, programs and projects that align to its core business model of *Build, Manage Journeys, Maintain* and *Enable*.

Activities undertaken by Roads and Maritime cover a vast spectrum of work, ranging from major new road infrastructure in urban development areas, through to minor and routine maintenance

activities such as line marking. The agency manages the National Highway and State Road networks in NSW, which carry about 70 per cent of all NSW traffic.

Roads and Maritime manages the following assets:

- About 18,000km of State roads, including over 4,300km of the National Road Network, for which the Australian Government provides a funding contribution, and about 150km of privately-funded toll roads
- About 3,000km of regional and local roads in the unincorporated area of NSW
- Nearly 5,300 bridges, major culverts and 22 tunnels
- Nearly 4,950 traffic signal sites and approximately 12,000 other traffic facilities, systems and corridor assets
- Over 2,100km of coastline and over 32,200km² of navigable waterways
- Nearly 50 commuter wharves
- Over 3,450 maritime aids to navigation.

Roads and Maritime implements road and traffic management activities through a range of delivery mechanisms. In most cases, skilled and experienced contractors are engaged to undertake the physical works. Local councils may also be engaged to deliver the project, making effective use of local knowledge and expertise. In addition, some maintenance activities in regional areas of NSW continue to be carried out by Roads and Maritime staff.

1.5.2 *Strategy and project planning*

Strategic context

The strategic directions for Roads and Maritime activities are established primarily through priorities set out in:

- ***NSW 2021: a plan to make NSW number one*** – the NSW Government’s 10 year strategic business plan which sets priorities for action and guides resource allocation to deliver economic growth and critical infrastructure throughout the state. The plan focuses on investing in and delivering an efficient and effective transport system, including road infrastructure that will relieve congestion, improve safety and expand capacity
- ***NSW Long Term Transport Master Plan*** – which provides a framework to deliver an integrated, modern transport system by identifying NSW’s transport actions and investment priorities over a 20 year timeframe
- ***State Infrastructure Strategy 2012*** – which sets out a range of priority public transport, urban roads and regional infrastructure projects.

Specific Roads and Maritime activities being undertaken to deliver on the identified strategic priorities are then detailed in a publicly available annual *Strategy and Delivery Plan*, which is reported on and updated quarterly.

Project planning

Roads and Maritime recognises that protection of the environment must be a driving consideration in the delivery of all road infrastructure projects. While all activities will inevitably have some level of environmental effect, early identification of risks and careful implementation of design and planning measures are critical to avoid unacceptable impacts that diminish environmental quality and attributes valued by the community.

Roads and Maritime applies an infrastructure lifecycle management approach to support timely and efficient delivery of road projects. This includes systems and supporting guidance that comply with international quality management requirements, and that incorporate consideration of environmental risks at all stages, from project inception onwards. Tailored systems are used to manage the specific challenges and differences between major and minor infrastructure projects. These encompass extensive procedures and guidelines for managing the planning and development of road activities, including consideration of environmental constraints, risks, assessment processes and community engagement.

In support of project planning, and to ensure compliance with statutory requirements and meet community expectations, Roads and Maritime also has well developed and comprehensive systems in place for environmental assessment and management. This includes specific procedures dealing with the identification of biodiversity issues, particularly threatened species, populations and ecological communities.

Roads and Maritime guidelines and procedures fall into two broad groups:

- **Environmental impact assessment (pre-construction)** - Roads and Maritime has statutory responsibilities to consider the impacts of proposed activities on the environment and has identified the delivery of environmental solutions as a core service in its customer commitments. The Roads and Maritime environmental assessment process aims to:
 - Identify environmental impacts at the earliest possible stage in project development
 - Take steps to avoid or minimise potential impacts as the first priority
 - Assess the unavoidable impacts of a proposed activity on the environment before making a decision on whether it should proceed, including consideration of cumulative impacts
 - Ensure the community is appropriately consulted and that their input is taken into account in decision-making
 - Provide appropriate offset measures to ensure that any residual impacts that cannot be avoided or minimised do not have an unacceptable environmental impact.
- **Environmental management and compliance (during construction and operation)** – to ensure that Roads and Maritime activities comply with legislative requirements, and deliver effective implementation of identified safeguards and mitigation measures during project construction and future on-going maintenance.

Further detail is provided in the discussion of the Program in Chapter 2.

1.5.3 *Area of operation and duration*

Roads and Maritime operates across NSW and, as noted above, undertakes a diverse set of activities related to building and maintaining the road network to support economic and community priorities.

For the purposes of the strategic assessment, and consistent with the NSW *Roads Act 1993*, the scope of activities and decision-making by Roads and Maritime under the Program includes:

- Road work carried out in NSW on:
 - Any freeway, highway or metropolitan main road, or
 - Any other road (whether classified or not) where Roads and Maritime retains responsibility or is undertaking road work, and
 - That is subject to environmental assessment under Part 5 of the EP&A Act.

- It does not include road projects within the area subject to the Western Sydney Growth Centres Strategic Assessment.

The expected duration of the Program is 25 years.

1.6 Legislative context

In undertaking road and traffic management activities, Roads and Maritime must comply with a range of legislative requirements.

The EP&A Act currently provides the primary legislative basis for planning and environmental assessment in NSW. The objects of the EP&A Act include encouragement of:

- The proper management, development and conservation of natural resources
- The provision and coordination of the orderly and economic use and development of land
- Protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats
- Ecologically sustainable development.

The objects also provide for increased opportunity for public involvement and participation in environmental planning and assessment.

The EP&A Act includes provisions to ensure that the potential environmental impacts of a development or activity are rigorously assessed and considered in the decision-making process.

Road and traffic management activities undertaken by Roads and Maritime are typically dealt with under one of the following mechanisms:

1. **Exempt development** – which requires no formal environmental assessment as it has been identified as having minimal environmental impact (for example, safety signage)
2. **Development that needs consent** – subject to Part 4 of the EP&A Act. This includes both local and state significant development (Part 4.1). The consent authority is usually the relevant local council or Minister for Planning
3. **Development that does not need consent** - subject to Part 5 of the EP&A Act, which requires the full range of environmental impacts associated with an activity to be considered before it may proceed. The ‘determining authority’ is usually a public authority planning to undertake the activity, or whose statutory approval is required
4. **State Significant Infrastructure** - subject to assessment under Part 5.1 of the EP&A Act and requires approval of the Minister for Planning.

The activities addressed by this strategic assessment and the Program are those subject to Part 5 of the EP&A Act, excluding state significant infrastructure (point 3 above).

Under Part 5 of the EP&A Act, proponents must ‘*examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity*’. The minimum statutory requirements that must be considered are set out in Clause 228 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) and in the guideline *Is an EIS required? – Best Practice Guidelines for Part 5 of the Environmental Planning and Assessment Act 1979*.

Figure 1-1 provides a summary of the key legislative elements relevant to the Program, and Roads and Maritime processes for managing the assessment of activities subject to Part 5 of the

EP&A Act. Where threatened species listed under NSW legislation are assessed as being significantly impacted, a species impact statement (SIS) is required. Refer Section 1.6.1 below for further details on this process.

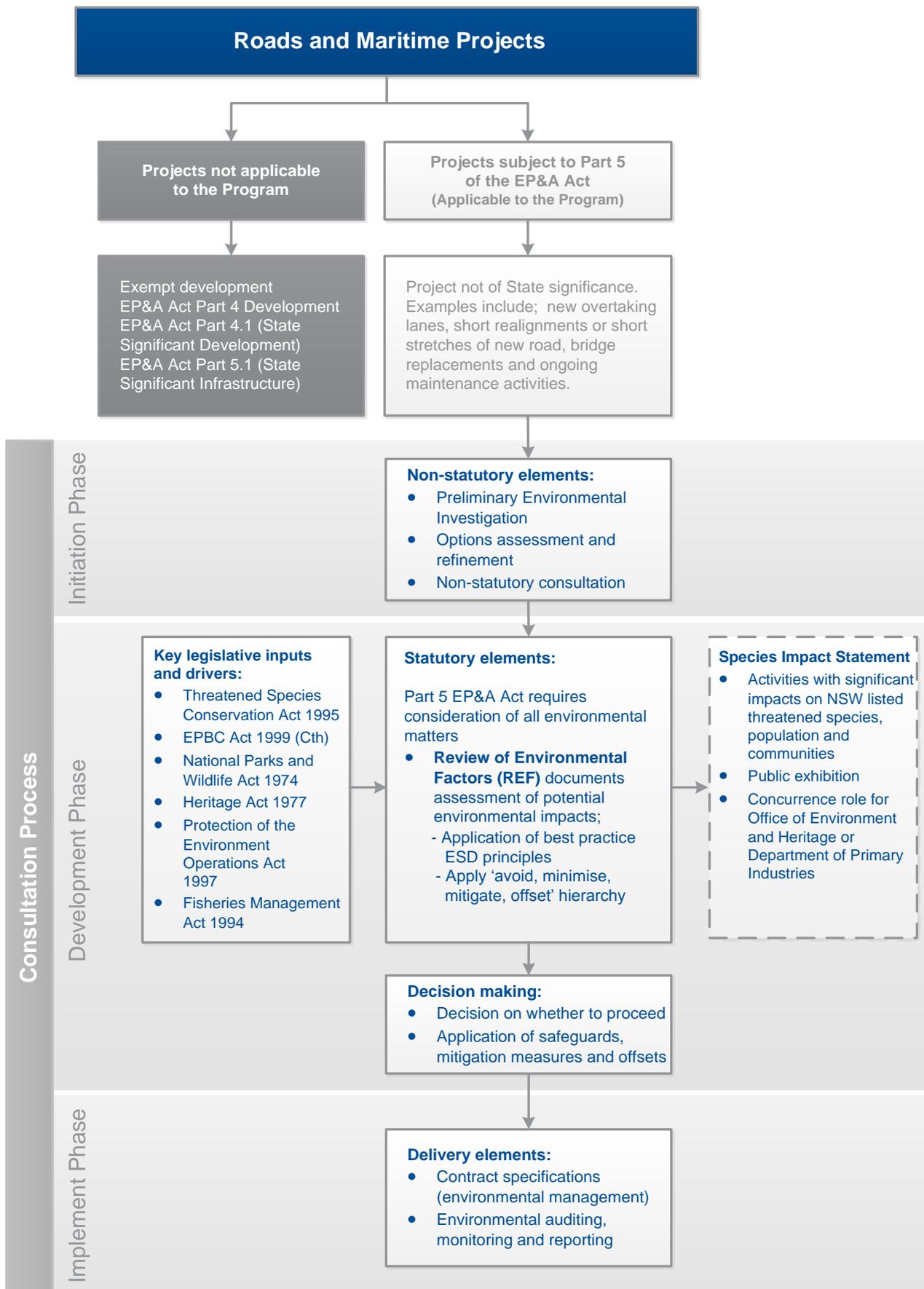


Figure 1-1 Key legislative elements and Roads and Maritime approach to assessment

1.6.1 *Preparing the environmental impact assessment*

Review of Environmental Factors – all Roads and Maritime activities

For activities for which Roads and Maritime is the proponent, and that require assessment under Part 5 of the EP&A Act, the assessment of environmental impacts is documented in a Review of Environmental Factors (REF). As a minimum, the REF must address the matters set out in clause 228 of the EP&A Regulation.

In preparing the REF, Roads and Maritime draws on suitably qualified and experienced specialists. A typical REF for a Roads and Maritime activity will involve a range of experts with skills in biodiversity, Aboriginal and historic heritage, hydrology, traffic planning, noise and air quality, and social and economic assessment.

Roads and Maritime also uses the REF to assess and document the potential impacts of an activity on matters of national environmental significance (MNES) identified under the EPBC Act.

Species Impact Statement – some Roads and Maritime activities

Some Roads and Maritime activities may also be assessed as likely to have a significant impact on threatened species, populations and ecological communities listed under the NSW *Threatened Species Conservation Act 1995 (TSC Act)* or the *Fisheries Management Act 1994 (FM Act)*.

Where this occurs, an SIS is undertaken and accompanies the REF. This is a complementary; more detailed assessment that examines the specific impacts of an activity on NSW listed threatened species. It does not address the assessment requirements of the EPBC Act, even though some species considered in the SIS may be listed under both that Act and relevant NSW legislation.

1.6.2 *Decision making*

Roads and Maritime is the determining authority for all its activities that are assessed by way of an REF. This is the case for all public authority proponents in NSW undertaking activities subject to Part 5 of the EP&A Act.

Roads and Maritime has developed internal systems to ensure separation and transparency in decision-making. These provide that responsibility for the final determination of REFs and decisions to proceed with a project are at a sufficiently senior level, tailored to the size and scale of the project, and independent of the person responsible for developing the project and preparing the REF.

In cases where there are likely to be significant impacts on threatened species and a SIS has been prepared, Roads and Maritime may only undertake the activity after obtaining separate approval from the relevant regulatory authorities (either the Office of Environment and Heritage or Department of Primary Industries). In this scenario, Roads and Maritime remains responsible for determining the REF (the overall environmental impact assessment) under Part 5 of the EP&A Act, but cannot proceed without concurrence with respect to NSW threatened species matters.

Similarly, if an activity has been found to be a controlled action under the EPBC Act, Roads and Maritime must currently obtain approval of the Australian Government Department of the Environment before proceeding.

1.6.3 *Public consultation*

Unless an SIS is required (refer Section 1.6.1 above), there is no general statutory requirement to publicly exhibit or seek comment on activities being assessed under Part 5 of the EP&A Act, although some activities do require consultation with particular public authorities under *State Environmental Planning Policy (Infrastructure) 2007*. For example, activities adjoining national parks or that may affect local council infrastructure.

Roads and Maritime has nevertheless adopted procedures to ensure that appropriate consultation occurs and opportunities for community input are provided on road infrastructure projects. That includes during the development of options to inform preferred projects, through to the environmental assessment process. In many cases that means Roads and Maritime will formally exhibit an REF for public review, even though it is not legally required to do so.

In the case of a Roads and Maritime activity that also requires preparation of an SIS, there are legislated public notification and exhibition requirements. This includes mandatory public exhibition of the SIS for 30 days and a requirement for consideration of submissions received.

1.7 Roads and Maritime actions covered by the Program

As described above, Roads and Maritime has major responsibilities with respect to the road network, which represents a significant public asset supporting economic development and activities essential for community access to employment, education and services.

Roads and Maritime undertakes a range of activities to ensure that this asset is developed and maintained to an optimal standard. This includes large infrastructure projects of state significance through to smaller scale projects such as new overtaking lanes, short realignments or short stretches of new road, bridge replacements and ongoing maintenance activities.

The strategic assessment process only addresses those road activities that are not considered to be of state significance. Namely, those Roads and Maritime activities that are subject to the environmental impact assessment requirements of Part 5 of the EP&A Act.

Projects that are of state significance are assessed under Part 5.1 of the EP&A Act.

1.7.1 *Description of actions (activities)*

The actions that are covered under the Program include all road and traffic management works assessed and determined by Roads and Maritime under Part 5 of the EP&A Act (with the exception of any such activities occurring within the area subject to the Western Sydney Growth Centres Strategic Assessment).

It does not include:

- **Activities of state significance** - typically this includes activities that require approval from the Minister for Planning. These are major state infrastructure projects assessed under Part 5.1 of the EP&A Act where the impacts on the environment are likely to be significant. Recent examples include the WestConnex project and major upgrades to the Pacific Highway
- **Minimal impact activities** - that do not require any environmental assessment or planning approval. These are generally known as 'exempt development' and typically comprise very small-scale works that have been identified in an environmental planning instrument (EPI) as having only minimal environmental impact
- **Maritime activities** – which are carried out by Roads and Maritime, such as redevelopment and maintenance of ferry wharves.

Appendix A provides a non-exhaustive list of the types of activities that would typically be undertaken by Roads and Maritime and to which Part 5 of the EP&A Act would apply. These are the activities that would be dealt with by the Program.

These activities can be categorised into eight broad groups based on the similarities in the nature of work and likely impacts on the Specified Protected Matters.

- Group 1 - Routine and minor work - preparatory, rehabilitation or investigative
- Group 2 - Routine and minor work - supporting infrastructure (such as signage and lighting)
- Group 3 - Routine and minor work - infrastructure work within current road footprint
- Group 4 - Ancillary facilities (such as work compounds and rest areas)
- Group 5 - Supporting infrastructure - basins, drains and culverts
- Group 6 - Utilities and fencing
- Group 7 - Work within waterways (such as snag removal and bank stabilisation)
- Group 8 - Primary infrastructure work (including carriageways, bridges and batters).

2 The Program

The Program subject to the strategic assessment comprises Roads and Maritime processes and commitments with respect to environmental assessment and subsequent decision-making for road and traffic activities subject to Part 5 of the EP&A Act.

The commitments that make up the Program are presented in this chapter. Roads and Maritime gives practical effect to these processes and commitments through a range of policies, procedural guidelines, practice notes and other guidance material.

The strategic assessment will examine what the impact would be on nationally listed threatened species, communities and migratory species (the Specified Protected Matters) of implementing the commitments set out in the Roads and Maritime Program.

The key outcomes intended to be delivered by the Program are summarised in Table 2-1 below.

Table 2-1: Key Program outcomes

EPBC Act Part 3 – Specified Protected Matter	Key outcomes
Listed threatened species and ecological communities	The survival and conservation status of listed species and ecological communities is promoted and enhanced, including through the conservation of habitat critical to the survival of a species or community and other measures contained in any recovery plans, threat abatement plans or conservation advices.
Listed migratory species	The survival and conservation status of migratory species and their critical habitat is promoted and enhanced, consistent with Australia’s international obligations.

In particular, the Program will ensure that any impacts on Specified Protected Matters will not be unacceptable or unsustainable, and will support achievement of the objects of the EPBC Act and Australia’s international obligations. This will be achieved through the following actions:

- Implementation of the Program consistent with the principles of ESD
- Application of the avoid, minimise, mitigate and offset hierarchy during all stages of activity planning and decision-making
- Comprehensive environmental impact assessment processes that take clear account of the Specified Protected Matters, including relevant policy and conservation guidance
- Appropriate opportunities for public consultation and input to inform environmental impact assessment and decision-making, tailored to the scale of likely impacts and level of community interest
- Implementation of appropriate environmental management standards during the undertaking of activities, supported by clear systems for applying targeted safeguards, undertaking inspections and audits, monitoring and adaptive management.

An overview of the how the Program commitments are delivered in practice by Roads and Maritime during the planning, assessment and implementation of an activity is provided in Figure 2-1. Each of the commitments is then discussed in more detail.

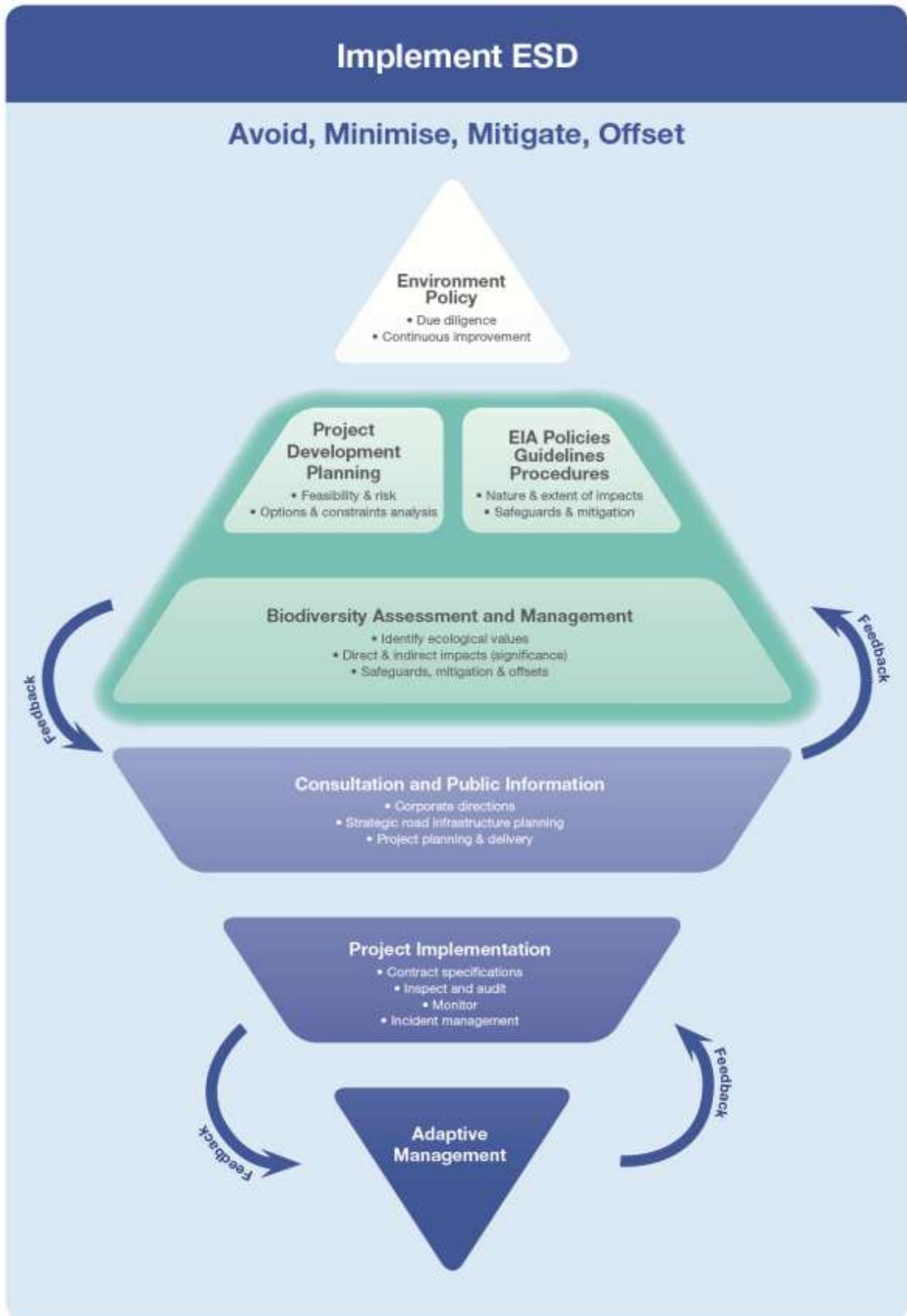


Figure 2-1 Delivering Program commitments for road and traffic management activities

2.1 Environmental management policy context

2.1.1 *Ecologically sustainable development (ESD)*

A key objective of the EPBC Act is to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources.

Roads and Maritime is committed to implementing and improving environmental performance with respect to road and traffic management activities undertaken by the agency.

This includes:

- Carrying out its business in an environmentally responsible manner by effectively identifying and managing any risks which may potentially impact the environment
- Taking all reasonable practical steps to ensure there is continuous improvement in environmental performance, including ongoing communication and awareness raising, active reporting of environmental incidents and continuous learning from experience
- Environmental management being an essential element of effective road related infrastructure planning, construction, maintenance and operation which must be properly considered and integrated into all phases of Roads and Maritime projects.

Roads and Maritime will ensure that road and traffic management activities are planned, assessed and undertaken consistent with the principles of ESD, as set out in NSW and Australian Government legislation (Box 2-1).

Box 2-1 – ESD principles

- *integration principle* – decision making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
- *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
- *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
- *conservation of biological diversity and ecological integrity* - namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration
- *improved valuation, pricing and incentive mechanisms* - namely, that environmental factors should be included in the valuation of assets and services, including the polluter pays principles

Program commitment one – ecologically sustainable development

Roads and Maritime will demonstrate due diligence in the provision of its services, manage its road and traffic management activities in a manner which is consistent with the principles of ESD, and continually improve environmental performance.

2.1.2 *Applying the ‘avoid, minimise, mitigate and offset’ hierarchy*

Roads and Maritime seeks to achieve a balanced outcome in developing and delivering road projects, taking account of environmental considerations together with economic and community objectives. That also includes a balanced approach to examining the particular environmental consequences of an activity, recognising that achieving an optimal overall outcome sometimes requires compromise and decisions regarding environmental values. For example, an option may protect biodiversity but have an adverse impact on historic heritage.

A fundamental component of implementing the principles of ESD is to ensure that assessment and decision-making processes are focussed on firstly avoiding environmental impacts, consistent with the precautionary principle. Impacts that cannot feasibly or reasonably be avoided should then be minimised and mitigated as far as practicable.

As a last resort, if an activity will still have residual impacts, after options to avoid or minimise have been exhausted, then these should be offset by appropriate measures that seek to maintain or improve overall environmental values and quality. Roads and Maritime acknowledges that offset measures in relation to Specified Protected Matters should be applied on a 'like for like' basis. It is through this hierarchical approach that unacceptable environmental impacts are avoided.

Roads and Maritime recognises the priority of applying the 'avoid, minimise, mitigate and offset' hierarchy in undertaking its road and traffic management activities to ensure protection of the Specified Protected Matters as follows:

- **Avoid** - Roads and Maritime's first priority is to avoid impacts to the environment, including Specified Protected Matters. This is achieved by early consideration of environmental issues from identification of constraints at project inception through to options analysis and selection of a preferred option, design investigation and assessment of the preferred option, detailed design, and implementation of on-ground safeguards during construction and operation and maintenance of the activity. The primary method to avoid impacts is to locate activities away from areas of known or potential high biodiversity value, including Specified Protected Matters (such as choosing a road route alignment that avoids an endangered ecological community, instead of one that has impacts on the community)
- **Minimise** – where an activity cannot feasibly or practicably avoid impacts on the Specified Protected Matters, Roads and Maritime seeks to ensure these are minimised as far as possible. That includes the application of measures such as road design refinements to reduce the scope of overall impact where feasible. For example, by using retaining walls rather than embankments, and bridges rather than culverts
- **Mitigate** – these are measures taken once all practicable steps to avoid or minimise impacts have been implemented. Mitigation or safeguard measures are detailed during the environmental impact assessment process and undertaken during construction and operation. Roads and Maritime guidelines and procedures identify a range of mitigation techniques to be applied, including re-establishment of native vegetation at the end of a project, weed management, provision of supplementary fauna habitat (such as nest boxes for appropriate species), and installation of erosion and sediment controls
- **Offset** – in those circumstances where all reasonable measures have been taken to firstly avoid and then minimise and mitigate impacts, but significant residual impacts will still occur, Roads and Maritime implements appropriate actions to ensure such impacts are offset. Roads and Maritime has a successful track record in developing and implementing offset strategies and makes this information publicly available. In determining the type and nature of suitable offsets for a particular activity Roads and Maritime applies relevant applicable internal and NSW Government policies and guidelines.

With regard to Specified Protected Matters, Roads and Maritime acknowledges that offsets need to be applied on a 'like for like' basis, i.e. the offset will comprise of the same community or species habitat being impacted. Roads and Maritime also recognises that offsets need to be implemented within an appropriate timeframe that is as close as possible to the commencement of the project. Proposed offsets will be identified as part of the environmental assessment documentation for the activity, including timeframes and arrangements for finalising the offset.

Program commitment two – protection hierarchy

Roads and Maritime will apply the 'avoid, minimise, mitigate and offset' hierarchy in undertaking its road and traffic management activities to ensure protection and avoid unacceptable impacts on the Specified Protected Matters. This will include:

- Seeking to avoid impacts as the highest priority
- Minimising and mitigating actions to reduce the extent and intensity of likely impacts
- Providing offsets where residual significant impacts occur for a Specified Protected Matter, with the appropriate offset for that Specified Protected Matter determined in accordance with a method identified in a Bilateral Agreement between the NSW and Australian Governments or otherwise agreed with, or endorsed by, the Australian Government Minister for the Environment.
- Assessment documentation for the activity provided to the RMS decision-maker will identify proposed offsets and include arrangements and timeframes for the securing of offsets.

2.2 Environmental impact assessment policies, guidelines and procedures

2.2.1 Overview

To achieve compliance with relevant environmental legislation and implement its corporate and policy objectives, Roads and Maritime has developed and enacted a comprehensive range of environmental impact assessment (EIA) policies, procedures and guidelines.

These provide a framework for scoping, assessing and decision-making for all Roads and Maritime activities that are subject to Part 5 of the EP&A Act. That includes consideration of impacts on the Specified Protected Matters from project inception through to project delivery.

As noted in Section 1.6, there are two complementary assessment pathways that may apply to an activity being dealt with under Part 5 of the EP&A Act:

- Assessment by an REF
- Assessment by an REF together with an SIS.

An SIS is prepared for those activities considered likely to have a significant impact on threatened species, communities and populations under the NSW *Threatened Species Conservation Act*. An SIS is therefore additional to the REF, and does not replace or substitute for the need for full and comprehensive assessment of all aspects of the proposal to be considered in the REF.

The main procedural implications of planning an activity that will require an SIS is that public exhibition of the SIS is a legislative requirement, and the activity cannot proceed without formal concurrence of the NSW Office of Environment and Heritage or the Department of Primary Industries.

2.2.2 Project development and planning

As discussed in Section 1.5.2, Roads and Maritime applies an infrastructure lifecycle management approach to undertaking road and traffic management activities, compliant with international quality management system requirements. This builds in consideration of environmental issues and constraints, including for Specified Protected Matters, from the earliest stages of a project and through its entire lifecycle. In particular, it provides for:

- Clear requirements for project management planning
- Feasibility and risk assessments, including identification of environmental risks
- Options investigation, including through mechanisms such as preliminary environmental investigations
- Consultation with relevant Roads and Maritime specialist environmental staff
- Internal decision-making “gateways”
- Compliance with relevant statutory requirements, including environmental impact assessment and approvals processes
- Planned community engagement and consultation
- Development of environmental specifications to be applied during implementation, such as contract requirements, environmental management plans, site procedures, monitoring and compliance.

Program commitment three – infrastructure lifecycle

Roads and Maritime will apply an infrastructure lifecycle management approach to undertaking road and traffic management activities, which incorporates measures to consider, assess and avoid unacceptable impacts to Specified Protected Matters during all relevant phases of a project.

2.2.3 General procedures for environmental impact assessment

Roads and Maritime has established policies, guidelines and procedures to ensure that the potential environmental impacts associated with undertaking road and traffic management activities are identified, assessed and determined or approved in accordance with all relevant statutory requirements. These provide practical and consistent tools to ensure decision-making takes direct account of Specified Protected Matters, consistent with the principles of ESD and in accordance with the avoid, minimise, mitigate and offset hierarchy.

Roads and Maritime’s general approach to environmental impact assessment for activities subject to Part 5 of the EP&A Act is separated into specific procedures that are tailored towards ensuring that the level of assessment required aligns with the scale, intensity and risks of a project. The procedures differentiate between:

- **Routine and minor works** – generally low impact activities associated with existing roads, such as safety improvements, and involving only limited vegetation clearing and soil disturbance. Examples may include: sealing of existing unsealed roads; vegetation removal beyond previously cleared areas to improve vehicle safety; and installation of new rest stops
- **Other works** (ie not routine or minor) – activities that have more than a minor impact, and typically of relatively greater complexity and environmental risk (such as sections of new road, bridge replacements and overtaking lanes).

These are supported by a range of practice notes and technical guidelines dealing with specific environmental issues, focussed on the types of potential impacts that arise with respect to Roads and Maritime activities. For example, to protect water quality and minimise erosion and sedimentation risks.

Collectively, these provide guidance regarding the preparation of an environmental impact assessment document (currently in the form of an REF) for all Roads and Maritime activities subject to Part 5 of the EP&A Act. This is a mandatory requirement.

Consistent with best practice approaches to environmental impact assessment, and statutory requirements, the REF provides the tool to bring together and assess all potential impacts associated with an activity, to enable decision-makers to be fully informed about the consequences of proceeding or not proceeding with a project. That includes discussion of:

- The scope of the project
- Its need and justification, including consideration of ESD principles
- Alternatives and options, including the “do nothing” option and demonstrating practical application of steps taken to avoid and minimise impacts
- Statutory requirements and approvals
- Community, local government and agency views
- Environmental impacts, including to Specified Protected Matters, and consideration of cumulative outcomes
- Environmental management, including safeguards and mitigation, together with identification of any offsets that may be required.

In addressing environmental impacts, the REF considers:

- **The nature of impacts** – including levels of confidence in predictions; environmental resilience; permanency or irreversibility; mitigation or management options; compliance with performance criteria, plans or policies; the public interest; and the need for additional studies
- **The extent of impacts** (generally and in environmentally sensitive areas) – including the type; size, scope (direct and indirect); intensity; and duration of any impacts.

Roads and Maritime procedures require specific consideration of potential impacts on matters of national environmental significance, including Specified Protected Matters, as part of preparation of the REF. This includes application of relevant Australian Government assessment guidelines and policies.

Box 2-2 Australian Government Department of the Environment – policy, plans and guidance material

The Australian Government Department of the Environment develops a range of guidance, policies and plans with respect to Specified Protected Matters under the EPBC Act.

This information includes:

- Listing advices
- Recovery plans
- Threat abatement plans
- Conservation advices
- Wildlife conservation plans
- Survey and significant impact guidelines.

Program commitment four – environmental impact assessment

Roads and Maritime will undertake best practice and rigorous environmental impact assessment of its activities, in accordance with relevant environmental legislation.

To that end, Roads and Maritime will maintain and continually improve its guidelines and procedures for environmental impact assessment, ensuring that consideration of Specified Protected Matters are clearly addressed and that the avoid, minimise, mitigate and offset hierarchy is applied.

Roads and Maritime will consider relevant EPBC Act policy, plans and guidance material, including in relation of offsetting, as part of the activity assessment process.

Roads and Maritime will also ensure that the environmental impact assessment of road and traffic management activities identifies and incorporates appropriate safeguards and management measures for the Specified Protected Matters. These will follow the SMARTA approach, meaning they will be: specific to the activity and site; measurable; achievable; realistic; time-driven; and auditable.

Roads and Maritime will not proceed with an action (that is subject to the strategic assessment) that will have an unacceptable impact on any Specified Protected Matter.

2.2.4 Biodiversity assessment and management procedures

In support of the overarching environmental impact assessment procedures and guidelines, Roads and Maritime maintains a number of specific biodiversity related guidelines and assessment requirements. These provide detailed direction on biodiversity conservation and management during the planning, construction, operation and maintenance of activities.

Roads and Maritime's current approach with respect to biodiversity, including for Specified Protected Matters, is:

1. Avoid and minimise impacts as the highest priority
2. Minimise and mitigate impacts where avoidance is not feasible or practicable in the particular circumstance
3. Offset where residual, significant unavoidable impacts will occur.

Assessment procedures – activity initiation and development phases

Roads and Maritime's biodiversity guidance requires that biodiversity assessments addressing the following matters are undertaken by appropriately qualified and experienced ecologists and incorporated into the REF:

1. Describe the ecological characteristics of the study area - including identification of the specific protected matters that may be affected by an activity, using a combination of existing available information and targeted field surveys conducted in accordance with accepted scientific methods
2. Identify the direct and indirect impacts of the activity – such as the direct removal of habitat features, together with indirect consequences such as the impacts of noise, light and changed hydrology
3. Identify the nature, extent, frequency, duration and timing of impacts
4. Evaluate the extent to which the activity contributes to processes known to threaten long-term survival – such as habitat loss and fragmentation
5. Determine the significance of impacts – which involves using published criteria and guidelines to determine whether an activity will have a significant impact on threatened species, ecological communities and populations listed under the applicable NSW and Australian Government environmental legislation
6. Propose environmental management measures to minimise, mitigate and if necessary offset impacts – which may range from further design refinements, through to construction safeguards, monitoring and adaptive management, and preparation and implementation of an appropriate offset strategy.

Management procedures – activity implementation phase

Roads and Maritime also maintains and updates biodiversity guidelines to ensure best practice biodiversity management measures are implemented during the implementation (construction) phase of an activity and future on-going operation and maintenance. These guidelines provide specific procedures to be applied and cover key matters such as: pre-clearing inspections; adopting exclusion zones; fauna handling protocols and managing unexpected finds; post-construction rehabilitation; and weed and pathogen management.

New listings of threatened species, communities and migratory species

Roads and Maritime procedures for biodiversity assessment require that the impacts of a project are considered with respect to the lists of threatened species, communities and migratory species that are applicable at the time. In practical terms, that means that each assessment process undertakes a full scan of the current listings under both NSW and Australian Government legislation to determine whether a project is likely to have an impact and hence whether detailed consideration is required. This mechanism ensures that the Program is not static in time and will accommodate new listings (and any de-listings) as they arise, together with any new conservation advice or guidance.

Program commitment five – biodiversity assessment

Roads and Maritime will undertake best practice and rigorous assessment of the potential impacts of its activities on biodiversity, as an integral part of project environmental impact assessment, and taking into account current and up-to-date information on species and communities listed under the EPBC Act.

To that end, Roads and Maritime will maintain and continually improve its guidelines and procedures for biodiversity assessment, ensuring that consideration of the Specified Protected Matters are clearly addressed, using appropriately qualified and experienced ecologists and taking account of up-to-date information from available sources and targeted field surveys. Roads and Maritime will ensure its assessment processes reflect accepted methodologies that are robust and repeatable.

Roads and Maritime will also maintain and continually improve its procedures with respect to management of biodiversity during the construction, operation and maintenance phases of an activity.

2.2.5 Related environmental guidelines and procedures

In addition to the key guidelines discussed above, Roads and Maritime has developed a number of other policies, procedures and guidelines to ensure its broader environmental responsibilities are met and support on-going improvement of environmental performance.

A number of these are also relevant to avoiding unacceptable impacts on the Specified Protected Matters during the undertaking of activities by Roads and Maritime. That includes: requirements for environmental information and performance measures to be included in construction contract documentation (refer Section 2.5.1 below); the preparation of construction environmental management plans; field guidance for maintenance crews; protection of water quality; erosion and sedimentation management; management of land contamination and acid sulphate material; and protection of historic and Aboriginal heritage.

Program commitment six – environment protection

Roads and Maritime will maintain and continually improve its guidelines and procedures for broader environmental protection during the undertaking of road and traffic management activities, recognising that these support the conservation of the Specified Protected Matters.

2.3 Consultation and public information

2.3.1 General requirements

As noted in Section 1.6.3 above, the objects of the EP&A Act provide for increased opportunities for public involvement and participation in environmental planning and assessment. The EPBC Act incorporates similar objectives that seek to promote co-operative approach to the protection and management of the environment.

Roads and Maritime works to ensure that appropriate opportunities for community input are provided during the planning and assessment of road and traffic management activities, and throughout the implementation phase (ie during construction).

Roads and Maritime guidelines for community participation seek to involve the community at three broad levels:

- **Strategic and corporate direction** - Roads and Maritime undertakes community engagement activities to inform high level and long-term strategy, including through advisory bodies, customer surveys, strategic planning and provision of information to the community on key infrastructure objectives and future directions
- **Program and project development** – structured community engagement programs, that are tailored to suit the particular project and level of community interest, are undertaken during the planning and development of road infrastructure, route and area strategies and road safety programs. These programs can include the public notification of, and invitations to comment on, strategic route assessments, preferred options and REFs
- **Project delivery and service provision** - Roads and Maritime has established systems and mechanisms to ensure the community is provided with information during the construction process, including access to project environmental assessment documents, environmental incident reporting, and general information on timing and implementation.

In seeking to consult and engage the community, Roads and Maritime applies best practice principles to ensure consultation is: meaningful; occurs at the earliest feasible formative stage; provides adequate and timely information; allows sufficient time and a range of opportunities for input; and that community views are clearly taken into account in decision-making. Roads and Maritime also employs a wide range of techniques ranging from public meetings to local information stalls, letter-box drops, door-knocks, newsletters, web-based information and formal public notification and exhibition.

In addition to broad community consultation, Roads and Maritime undertakes targeted consultation with key NSW agencies, local government, industry, community organisations and the Aboriginal community. This ensures that stakeholders with expert knowledge, or that may be directly affected by an activity, are able to contribute to the assessment process and to directly inform the scope and nature of projects.

Program commitment seven – consultation

Consistent with its corporate objectives and commitments, Roads and Maritime will ensure that appropriate opportunities are provided for community and stakeholder consultation during the environmental impact assessment process for road and traffic management activities.

Specifically, for activities that are assessed as likely to significantly impact on Specified Protected Matters this will include public notification on the Roads and Maritime web-site and an opportunity to provide comment on the project environmental assessment documentation (minimum 30 days).

If a Roads and Maritime activity is already subject to the preparation of a species impact statement (SIS), then public notification of the project environmental assessment documentation will occur at the same time as the SIS (minimum 30 days)..

Community and stakeholder input to Roads and Maritime activities will be considered and taken into account during the decision-making process on the scope of any refinements to the project or whether a project should proceed.

In addition, information regarding activities that have been determined to proceed following completion of relevant environmental assessment requirements will be made publicly available by Roads and Maritime.

2.4 Decision-making

As discussed in Section 1.5.2, Roads and Maritime has well developed systems in place to ensure the final decision on whether to proceed with an activity is informed by comprehensive consideration of all potential environmental impacts and feasible safeguards. That includes information on the consequences of undertaking an activity for the Specified Protected Matters, including steps taken to avoid and minimise impacts, mitigation measures to be applied during project delivery, and any offset arrangements.

The REF provides the key assessment documentation to assist the decision-maker as it draws together and considers all environmental issues relevant to an activity, including the social and economic implications. The REF also serves as the practical demonstration of how Roads and Maritime has satisfied legal obligations under both NSW and Australian Government legislation to take account of potential environmental impacts and determine whether additional, higher-level environmental assessments may be required.

Roads and Maritime procedures require clear documentation of the decision with respect to an REF. Internal delegations specify the level of sign-off required for particular activities, applying a risk-based hierarchy that requires larger, more complex and higher risk projects to be determined by more senior officers than projects of smaller scale and risk. Decision-making delegates take into account the full set of assessment information for a project, and recommendations prepared by specialist staff that are separate to the project development team, to assist in transparency. Typical information made available to the decision-maker includes:

- The REF, including any amendments or revisions to the proposed activity made following community consultation
- Specialist studies considering biodiversity, Aboriginal and historic heritage, flooding, air and noise, soil management, etc
- A submissions report, outlining issues raised by the community and any responses
- A decision memo identifying that the REF has examined and taken into account to the fullest extent possible all matters affecting the environment, including the requirements of clause 228 of the EP&A Regulation, and whether there is likely to be a significant impact on the environment and/or threatened species, populations and communities or their habitat
- Consideration of audit or inspection requirements.

At the conclusion of the decision-making process, the final determined REF and submissions report are made publicly available.

Program commitment eight – decision-making

Consistent with statutory requirements and assessment guidelines, Roads and Maritime will ensure that decision-making on whether to proceed with an activity takes into account all relevant consequences for the Specified Protected Matters, including from direct and indirect impacts.

Decision-making will be made by appropriately senior level delegates and on the basis of detailed information contained in the REF, supporting technical information and giving consideration to the outcomes from community consultation.

Roads and Maritime will make determined REFs and submissions reports publicly available.

2.5 Project implementation

2.5.1 Contract specifications

Roads and Maritime recognises the strategic and operational benefits of taking steps to ensure that environmental management is an integrated part of the culture of construction industry practices. Roads and Maritime also supports the promotion of on-going continuous improvement towards best practice in environmental management.

Roads and Maritime requires construction contractors tendering for roadwork to have environmental management systems in place that are appropriate to the scale and potential environmental impacts associated with that activity. For larger more complex projects, contractors are required to have an accredited internationally recognised environmental management system.

As part of its procurement and delivery procedures Roads and Maritime also prepares detailed contract specifications covering environmental protection requirements for each project. These identify the minimum environmental management and protection outcomes to be delivered by the contractor, including safeguards and mitigation measures arising from the REF process, and legislative obligations. The specifications provide direct reference to arrangements for the protection of biodiversity, including obligations under relevant Australian Government environmental legislation, and implementation of Roads and Maritime biodiversity management procedures (refer Section 2.1 above).

Program commitment nine – environmental performance

Roads and Maritime will support the adoption and application of best practice environmental management standards by specifying environmental performance outcomes in contractual arrangements for the delivery of road and traffic management activities. That will include requirements for detailed environmental management plans, compliance with statutory requirements, and implementation of safeguards and mitigation actions identified during the environmental impact assessment process (as documented in the REF). This includes incorporation of measures for the protection of Specified Protected Matters.

Roads and Maritime will ensure that any required offsets for impacts to the Specified Protected Matters are secured in accordance with the arrangements and timeframes identified in the environmental assessment documentation for the activity.

2.5.2 Inspections and auditing

Roads and Maritime places a high priority on ensuring that required environmental management standards and outcomes are implemented during project delivery.

Road and traffic management activities undertaken by or on behalf of Roads and Maritime are subject to a system of project inspections and audits. The inspection and audit regime that is applicable to a particular project is tailored to match the scale and complexity of the activity.

For activities that go beyond considered minor or routine works (such as on-going maintenance), the following broad requirements will typically apply:

- **Construction environmental management plan (CEMP)** – contract specifications will require the CEMP to detail arrangements for regular site inspections to assess the adequacy and effectiveness of environmental controls, with a particular focus on higher risk activities and processes, work in proximity to environmentally sensitive areas, and preparedness for adverse site conditions such as weather events

- **Inspections** – these are undertaken on-ground as follows:
 - On-going (ie day-to-day) – by the project Environmental Site Representative(s) (ESR), reporting to an overall project Environmental Management Representative. Under these arrangements, responsibility is allocated for overseeing implementation of all relevant environmental management requirements for a project, including assessing the functioning of environmental safeguards (such as exclusion fencing and erosion and sediment controls) and authority to stop work to address or prevent nonconformities
 - Periodic – these occur generally on a fortnightly or monthly cycle, depending on the project. These inspections are typically undertaken by designated Roads and Maritime staff working collaboratively with the ESR and targeting key areas of environmental risk. Roads and Maritime has established procedures for undertaking, recording and acting on the results of environmental inspections
- **Auditing** – Roads and Maritime requires planned regular governance audits of all construction projects. The specific extent and timing are determined on a risk assessment basis. However, in general a start-up audit is undertaken within 3 months of project commencement, regular audits at 6-monthly intervals, and a project completion audit at the conclusion. The audit process provides a formalised and centralised system of review that sits above the more frequent ground-based assessments that occur on an on-going basis during the life of a project.

Program commitment 10 – inspections and auditing

Roads and Maritime will continue to implement a risk-based system of activity inspections and project audits to ensure compliance with construction contract specifications, construction environmental management plans, statutory requirements, and implementation of safeguards and mitigation actions identified during the environmental impact assessment process. This will ensure any measures relevant to avoiding unacceptable impacts to Specified Protected Matters are delivered.

2.5.3 Monitoring

In addition to ongoing standard inspection and auditing arrangements during construction, Roads and Maritime activities are regularly subject to specific and targeted monitoring actions. Monitoring is undertaken when there is a particular issue of environmental or community significance that warrants detailed on-going review and assessment during the life of the activity. For example, the effectiveness of noise attenuation measures proximate to road-works based on assessed changes in traffic volumes and mix as a result of a project. Monitoring may also occasionally continue during the operational phase of a project, such as the use of wildlife crossing facilities.

Not all Roads and Maritime activities will warrant or require a monitoring program(s). The need for monitoring will be identified during the environmental impact assessment of the activity. If monitoring is required, the particular aims, methods and practical application of the monitoring program will be developed using appropriate ecological expertise. Importantly, an objective of monitoring undertaken by Roads and Maritime will be to ensure that the results of monitoring are used to inform and improve environmental management for the activity, consistent with the principle of adaptive management (refer Section 2.5.5). Monitoring programs are therefore usually accompanied by identified contingency actions, which are to be put into effect if results indicate certain outcomes or impacts have occurred.

Program commitment 11 – monitoring

Roads and Maritime will determine the need for environmental monitoring, including but not limited to Specified Protected Matters, during the environmental impact assessment of road and traffic management activities, taking into account advice from appropriately qualified and experienced ecologists.

Where a need is identified, Roads and Maritime will develop and undertake appropriate targeted monitoring that is directly relevant to the activity, either during the construction and/or operational phases. To ensure the effectiveness of monitoring, Roads and Maritime may also pool resources for a range of projects into a larger monitoring program that will provide meaningful and useful information to improve overall environmental management.

2.5.4 Incident management

Roads and Maritime takes all reasonable and practicable measures to avoid unforeseen or inadvertent environmental impacts during project implementation, such as leaks, spills or unauthorised vegetation removal, and has extensive procedures in place to minimise such risks. Where risks are identified during project planning, pre-emptive steps are taken. For example, installation of spill basins as part of road upgrades. However, given the operational extent of Roads and Maritime activities, the work involved and the nature of receiving environments, from time-to-time unplanned incidents do occur.

Given this context, Roads and Maritime recognises the need to identify, report and act on recorded incidents as soon as possible. Roads and Maritime follows a detailed system for classifying and reporting incidents, which sets out responsibilities for both immediate action (to prevent further harm), taking of corrective measures (such as clean-up and rehabilitation), and feedback into agency processes to avoid future recurrence. Incidents involving harm to threatened species, populations and communities are considered to fall within the most serious category and are therefore subject to the most rigorous incident and reporting requirements.

Roads and Maritime activities remain subject to all relevant statutory requirements. In the unfortunate event that unauthorised impacts do occur, Roads and Maritime recognises that enforcement actions may arise.

Program commitment 12 – incident management

Roads and Maritime will continue to implement a system for incident reporting and management. Incidents that potentially impact high biodiversity conservation values, including the Specified Protected Matters, are located within the most serious category and subject to comprehensive reporting and management requirements.

Roads and Maritime will also comply with all applicable statutory requirements for incident notification, and will work with relevant authorities to firstly ensure risks to Specified Protected Matters are minimised, and secondly to ensure any inadvertent unauthorised impacts are addressed as soon as practicable.

2.5.5 Adaptive management

Adaptive management is a process for continually improving environment management policies and practices by using the lessons and experiences gained from operational programs. Adaptive management also provides an iterative and practical means to address uncertainties that may arise during project implementation.

Roads and Maritime applies an adaptive management approach for road and traffic management activities through the following key mechanisms:

- **Project inspections and audits** – as discussed in Section 2.5.2, all construction projects are subject to fit-for-purpose inspection and audit processes, which are typically detailed in Construction Environment Management Plans. These enable the on-ground delivery of projects to be reviewed in ‘real-time’ and any deficiencies managed through a corrective action reporting mechanism. For example, unsatisfactory installation or maintenance of fauna exclusion fencing would be identified and either repaired, reinstated or altered as necessary to address the required safeguards and standards set out in the environmental management documentation
- **Targeted monitoring** – as also set out in Section 2.5.3, targeted monitoring of particular environmental matters may also occur during the implementation and on-going operation of road and traffic management activities. Monitoring programs are established with clear objectives and response measures, so that the results of monitoring can (if necessary) be applied to inform adaptation of specific elements of the project. For example, if the results indicated that ponds provided to support frog breeding were not achieving intended outcomes, then contingency measures may be applied to re-design or modify the ponds or put other safeguards into effect
- **Project completion reviews** - these are undertaken for targeted road projects as a means to capture and document the experiences and ‘lessons learnt’ during implementation, particularly where more complex issues or matters of community interest have arisen. The outcomes of the review are then fed into the initiation phase in planning for future similar projects.

Program commitment 13 – adaptive management

Roads and Maritime will support implementation of adaptive management measures that facilitate continuous improvement in undertaking road and traffic management activities, through pragmatic and practical steps building on the inspection, audit and monitoring regime applicable to particular projects.

2.6 Environmental awareness and training

Consistent with agency policies, Roads and Maritime is committed to ensuring that staff are ‘provided with the skills, awareness and leadership to achieve the Roads and Maritime’s responsibilities’. All Roads and Maritime personnel involved in activities that could have impacts on the environment receive regular and on-going training to ensure that they have the knowledge and skills necessary to undertake relevant tasks and to minimise environmental risks. In addition, contractors engaged in road projects are required to undergo extensive induction training, which includes specific focus on environmental protection and management obligations.

Training and development needs are identified through projects audits, incident monitoring systems, business planning and agency-wide strategies.

Program commitment 14 – education and training

Roads and Maritime will invest appropriate resources to ensure staff and contractors are suitably trained and skilled for the purposes of undertaking tasks relevant to protection of the environment. That includes work actions that support the avoidance of unacceptable risks to Specified Protected Matters, such as practical application of the ‘avoid, minimise, mitigate, offset hierarchy’ to project delivery, environmental impact assessment, environmental and management and project inspection, auditing, monitoring and incident reporting.

3 How the Program meets the EPBC Act objects and protects Specified Protected Matters

This section summarises how the Program (as described in Chapter 2) achieves the objectives of the EPBC Act. In deciding whether to endorse the Program, the Australian Government Environment Minister must be satisfied that the Terms of Reference for the strategic assessment have been adequately addressed. Table 3-1 provides an overview of how Roads and Maritime meet the endorsement criteria.

Table 3-1: Meeting the endorsement criteria

Endorsement criteria	Delivery
<p>Protects the environment, especially the Specified Protected Matters, being nationally listed:</p> <ul style="list-style-type: none"> • Threatened species • Ecological communities • Migratory species 	<p>Roads and Maritime will:</p> <ul style="list-style-type: none"> • Apply the avoid, minimise, mitigate and offset hierarchy during project development, environmental assessment and decision-making. Offsets for impacts to Specified Protected Matters will be applied on a like-for-like basis. • Comprehensively assess potential environmental impacts of its activities, incorporating advice from appropriate and experienced ecologists with respect to the Specified Protected Matters and taking into account up-to-date information and conservation guidance • Apply robust procedures for the protection of biodiversity during construction and subsequent operation of road facilities, including through contractual arrangements and inspection, auditing, monitoring and incident reporting systems. <p>Collectively, the above measures will support achievement of Australia’s obligations under relevant international conventions.</p> <p>Roads and Maritime will not proceed with an action (that is subject to the strategic assessment) that will have an unacceptable impact on any Specified Protected Matter(s). In determining whether an unacceptable or unsustainable impact will occur, Roads and Maritime will take into account:</p> <ul style="list-style-type: none"> • Whether there is a real chance or possibility that the activity threatens long-term survival of specific protected matters, such that extinction may occur • Consistency with relevant threat abatement plans and recovery plans, wildlife conservation plans, bioregional plans and related threatened species initiatives • Whether suitable offsets can be secured, including additional or supplementary actions that may be required • Have regard to conservation advices and any relevant guidelines provided by the Australian Government Department of the Environment.
<p>Promotes ecologically sustainable development</p>	<p>Roads and Maritime will:</p> <ul style="list-style-type: none"> • Promote and apply ESD principles during the planning, assessment and implementation of road and traffic management activities • Apply the precautionary principle and ensure sufficient and current information is available on potential environmental impacts, including affecting the Specified Protected Matters, to enable informed decision-making • Integrate both short and long-term economic, environmental and social considerations into decision-making on activities, including direct, indirect and cumulative consequences.

Endorsement criteria	Delivery
Promotes the conservation of biodiversity	<p>Roads and Maritime will:</p> <ul style="list-style-type: none"> • Promote the conservation of biodiversity as a key priority in the development, planning, assessment and implementation of road and traffic management activities • Apply the avoid, minimise and offset hierarchy during project development, environmental assessment and decision-making • Comprehensively assess potential environmental impacts of its activities, incorporating advice from appropriate and experienced ecologists with respect to the Specified Protected Matters and taking into account up-to-date information and conservation guidance • Apply robust procedures for the protection of biodiversity during construction and subsequent operation of road facilities, including through contractual arrangements and inspection, auditing, monitoring and incident reporting systems. <p>Roads and Maritime will not proceed with an action (that is subject to the strategic assessment) that will have an unacceptable impact on the Specified Protected Matters. In determining whether an unacceptable or unsustainable impact will occur, Roads and Maritime will take into account:</p> <ul style="list-style-type: none"> • Whether there is a real chance or possibility that the activity threatens long-term survival of specific protected matters, such that extinction may occur • Consistency with relevant threat abatement plans and recovery plans, wildlife conservation plans, bioregional plans and related threatened species initiatives • Whether suitable offsets can be secured, including additional or supplementary actions that may be required • Have regard to conservation advices and any relevant guidelines provided by the Australian Government Department of the Environment.
Promotes a cooperative approach to the protection and management of biodiversity and Specified Protected Matters	<p>Roads and Maritime will:</p> <ul style="list-style-type: none"> • Work cooperatively with relevant Australian Government, state and local governments, industry, Aboriginal groups, local organisations and the community during the development and planning of road and traffic management activities • Provide appropriate opportunities for community input into decision-making, including during the environmental assessment of projects • Take community feedback into consideration during decision-making.
Assists in the cooperative implementation of Australia's environmental responsibilities	<p>Roads and Maritime will not act inconsistently with Australia's international environmental obligations for the conservation of biodiversity.</p> <p>Roads and Maritime will not proceed with an action (that is subject to the strategic assessment) that will have an unacceptable impact on the Specified Protected Matters. In determining whether an unacceptable or unsustainable impact will occur, Roads and Maritime will take into account:</p> <ul style="list-style-type: none"> • Whether there is a real chance or possibility that the activity threatens long-term survival of specific protected matters, such that extinction may occur • Consistency with relevant threat abatement plans and recovery plans, and related threatened species initiatives • Whether suitable offsets can be secured, including additional or supplementary actions that may be required • Any relevant guidelines provided by the Australian Government Department of the Environment.

Endorsement criteria	Delivery
Recognise and promote the role and knowledge of indigenous peoples in the conservation of biodiversity	<p>Roads and Maritime will:</p> <ul style="list-style-type: none"> • Work cooperatively with relevant Australian Government, state and local governments, industry, Aboriginal groups, local organisations and the community during the development and planning of road and traffic management activities • Provide appropriate opportunities for community input into decision-making, including during the environmental assessment of projects, and including contributions from indigenous stakeholders • Take community feedback into consideration during decision-making.

3.1 Response to unacceptable impacts

Despite best endeavours and implementation of the actions outlined in the Program during the development and planning of a road or traffic management activity, it nevertheless remains possible that an unacceptable impact on a Specified Protected Matter could occur if a project were to proceed. In the event that an unacceptable impact is identified during the planning and assessment of an activity subject to Part 5 of the EP&A Act, Roads and Maritime will:

- Not proceed with the activity as proposed
- Re-examine options to reduce the impacts to a level that is acceptable, including through additional offsets or supplementary actions
- Determine whether impacts of the activity are of such significance that it would be more appropriately considered under the environmental impact assessment requirements applicable to state significant infrastructure projects (under Part 5.1 of the EP&A Act)
- Consult with the Australian Government Department of the Environment.

Roads and Maritime will not proceed with the activity (that is subject to the strategic assessment) until such time as actions have been undertaken, or are committed to be undertaken, to ensure impacts will not be unacceptable.

4 Program evaluation and review

Roads and Maritime recognises that ensuring the effectiveness of the Program in safeguarding Specified Protected Matters is an on-going task. The Program is not static; it is flexible and must have the capacity to respond to emerging information, conservation practice and approaches.

Chapters 2 and 3 of this report outline the commitments with respect to ensuring that particular elements of Program, such as Roads and Maritime environmental impact assessment procedures, are subject to regular review and updating. These commitments will ensure that the consideration of road and traffic management activities, and implications for the Specified Protected Matters, takes account of matters such as new national species listings, contemporary conservation advice, and evolving methods for field assessment and calculation of both impacts and offset requirements.

This section outlines the higher level actions to ensure the overall Program through its entire life-time is able to function effectively and is consistent with the objectives of the EPBC Act. These have been developed in consideration of the national assurance framework developed by the Australian Government to support implementation of bilateral agreements.

4.1 Program evaluation

Roads and Maritime will:

- Review the operation of the Program within 18 months of endorsement by the Australian Government Minister for the Environment to assess its initial performance and ensure that any impacts from implementation of the Program commitments are, as a minimum, not having an unacceptable impact on Specified Protected Matters
- Thereafter, review the Program on a five-yearly basis.

The review will enable Roads and Maritime to determine if refinements to management arrangements and standards are required to ensure the commitments with respect to Specified Protected Matters are being delivered by the Program.

Terms of reference for each review will be developed and agreed in consultation with the Australian Government.

Outcomes of the reviews will be provided to the Minister for the Environment and made publicly available.

In addition, it is acknowledged that the Australian Government may initiate an independent audit of the Program's implementation. Roads and Maritime will work with the Australian Government and any independent auditor to support the undertaking of any audit. By agreement, an audit may also substitute for one of the planned regular reviews discussed above.

4.2 Program reporting

Roads and Maritime will maintain information on road and traffic management activities subject to the Program, as part of its individual project management systems. That will include retaining documentation with respect to project design, environmental assessment, decision-making and implementation (eg. compliance inspections). As noted in Section 1.6.3, information will be publicly available regarding activities that have been determined to proceed following completion of environmental assessment.

Roads and Maritime will also provide an annual report on its website regarding activities assessed under Part 5 of the EP&A Act that were identified as having a significant impact on the Specified Protected Matters. The report will include the following matters and any other specific information required by the Australian Government:

- Identify the project
- Identify the Specified Protected Matters impacted by the activity
- Summarise the nature and extent of impacts on the Specified Protected Matters
- Summarise the public consultation process for the project
- Identify any mitigation or offset measures applied.

4.3 Program modification

If during the course of implementing the commitments of the Program, or arising from the periodic reviews identified in Section 4.1, issues are identified that may require substantive modification of Roads and Maritime operational practices, consultation will first occur with the Australian Government Department of the Environment. Roads and Maritime will endeavour to ensure that any necessary operational adjustments are implemented to ensure the Program endorsement is maintained and the overarching aim of avoiding unacceptable impacts to Specified Protected Matters.

Appendix A Summary list (non-exclusive) of Roads and Maritime activities

The table below provides a non-exhaustive list of the types of activities that would typically be undertaken by Roads and Maritime under Part 5 of the EP&A Act. These are the types of activities that are applicable to the Program.

The types of activities identified in the table below have been categorised into the following eight broad groups based on the similarities in the nature of work and likely impacts on the Specified Protected Matters:

- Routine and minor work - preparatory, rehabilitation or investigative
- Routine and minor work - supporting infrastructure (such as signage and lighting)
- Routine and minor work - infrastructure work within current road footprint
- Ancillary facilities (such as work compounds and rest areas)
- Supporting infrastructure - basins, drains and culverts
- Utilities and fencing
- Work within waterways (such as snag removal and bank stabilisation)
- Primary infrastructure work (including carriageways, bridges and batters).

Description of typical activities subject to the Program (non-exhaustive list)

Minor work - infrastructure work within current road footprint

- Safety barriers or systems including Jersey/Briffin barriers
- Minor road pavement or shoulder work (such as patching, grading, re-sheeting, sealing and re-sealing)
- Kerb and guttering
- Minor works and routine maintenance - repairs and general upkeep of road pavement; cleared shoulders
- Minor works and routine maintenance - existing access tracks and bridges.

Minor work - preparatory, rehabilitation or investigative

- Survey / monitoring (ie property survey, baseline data collection for biodiversity, water and air quality, etc)
 - Geotechnical and soil contamination investigations
 - Property acquisition
 - Landscaping works
 - Site rehabilitation and landscaping, including revegetation, regeneration and re-use of woody debris, bushrock and snags
 - Conservation works to protect biodiversity / heritage values, such as fencing, interpretive signage, weed management, etc
 - Removal of temporary construction measures, such as erosion and sediment controls
 - On-going monitoring, including use of installed equipment (such as groundwater piezometers)
 - Management of encroaching vegetation to remove hazards, and weed and pest species control (including herbicide application and manual removal)
 - Upgrading or maintenance of landscaping, or vegetation management (such as weed spraying, slashing and pruning)
-

- Repair or replacement of lighting, mechanical systems, electrical equipment or air monitoring equipment, replacement of screening of overhead bridges and removal of graffiti or debris
- Installation, replacement, maintenance of temporary structures (ie bus stops, bus shelters, signs) for alternative transport arrangements required by road work / maintenance / repair that are removed as soon as practicable.

Minor work - supporting infrastructure

- Road ferries
- Disabled person access paths and ramps
- Toll collection systems
- Security systems including Closed Circuit Television (CCTV)
- Bus stops/shelters
- Pedestrian and cyclist facilities
- Street furniture (such as seats, bins and directional signs)
- Removal from or addition to existing traffic lights of items such as signal displays, loops or buttons,
- Street lighting
- Pavement and road surface markings (such as bus lane markings), lane delineators, electric pavement lights, detection loops and traffic counters
- Directional, safety, advisory signs, including gantries and overhead structures
- Minor works and routine maintenance - repairs and general upkeep of culverts and drains
- Minor works and routine maintenance - fences, safety barriers.

Primary infrastructure work

- Carriageways, including for private and public transport
- Bridges
- Viaducts
- Access tracks and service roads, including for survey and investigations
- Fauna crossing structures, including underpasses and land bridges
- Demolition and removal of existing structures (such as bridges)
- Slope stability works that are required for safety reasons and minor road safety improvements
- Batters and embankments, including extraction and placement of material
- Soil removal/remediation
- Preloading - soft soils management.

Utilities and fencing

- Fencing (permanent and temporary), including noise barriers and fauna fencing
- Utility relocation and/or installation.

Ancillary facilities

- Roadside facilities and rest areas
- Ancillary facilities including works compounds, stockpile sites, toilets/amenities, temporary offices, chemical storage, parking, plant storage and concrete batching.

Supporting infrastructure - basins, drains and culverts

- Water quality basins (permanent and temporary)
- Culverts, drains, causeways and other works
- Drainage and storm water infrastructure, including culverts.

Work within waterways

- Work within waterways, including dredging, snag removal, bank stabilisation reclamation and flood protection.

