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Vegetation Removal Policy

Standard Operating Procedure under the Native Vegetation Act 1991











Vegetation Removal Policy



First Published: February 1998

Revision 18: July 2020 (update to Development Regulations 2008 Regulated tree financial offset)

Knet doc: # 1965602

The Native Vegetation Council first approved this document on 30 March 2005. It was reviewed and its continued approval endorsed by the NVC as the Department of Planning, Transport and Infrastructure, Standard Operating Procedure under the Native Vegetation Act 1991.

This document has been prepared by Technical Services, Asset Management within the Department of Planning, Transport and Infrastructure. It has been approved and authorised for use by the Department of Planning, Transport and Infrastructure and its authorised agents by:

GENERAL MANAGER INFRASTRUCTURE DELIVERY

25 July 2017

Graeme Brown

GENERAL MANAGER ASSET MANAGEMENT July 2017

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List of acronyms

AAR	Aboriginal Affairs and Reconciliation, SA Department of State Development
DAC	Development Assessment Commission
DEWNR	Department of Environment, Water and Natural Resources
DoEE	Department of the Environment and Energy (Commonwealth)
DPTI	Department of Planning, Transport and Infrastructure
EIAR	Environmental Impact Assessment Report
EPBC	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
GMAM	General Manager, Asset Management (DPTI)
GMID	General Manager, Infrastructure Delivery (DPTI)
MAAR	Minister for Aboriginal Affairs and Reconciliation
NPW Act	National Parks and Wildlife Act 1972
NV Regulations	Native Vegetation Regulations 2017
NVA	Native Vegetation Act 1991
NVAP	Native Vegetation Assessment Panel (subset of Native Vegetation Council)
NVC	Native Vegetation Council
NVB	Native Vegetation Branch (DEWNR)
PM	Project Manager
PEA	Principal Environmental Advisor, Technical Services, Asset Management (DPTI)
SEA	Senior Environmental Advisor / Senior Environmental Process Advisor, Technical Services, Asset Management (DPTI)
SEB	Significant Environmental Benefit
SOP	Standard Operating Procedure

Glossary

Agricultural areas of South Australia	As defined in the Native Vegetation Council <i>Guide for applications to clear native vegetation – Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017</i> , agricultural areas are those within the following Natural Resources regions: Adelaide and Mount Lofty Ranges, Eyre Peninsula, Northern & Yorke, SA Murray-Darling Basin, and South East.
Amenity tree	A tree which, by virtue of its size and aesthetic qualities, provides amenity. Amenity trees do not include native vegetation as defined by the <i>Native Vegetation Act 1991</i> , or declared plants or environmental weeds (with the exception of environmental weeds that are planted and have amenity value). Amenity trees are usually planted trees, but may include self-sown plants if they have high amenity value.
Amenity value of vegetation	A measure of how highly the community values the contribution of the vegetation to the pleasantness and attractiveness of the local landscape. If a tree is at a location readily viewed by the public (e.g. along transport corridors, or accessible by the community via other means including walking, horse riding, mountain bike riding and off road vehicles), then its amenity value must be considered.
Building	In accordance with the Native Vegetation Regulations 2017, a building is a building or structure that is permanently fixed to land so that it cannot be moved without dismantling or destroying it and – includes a transportable building if the building is connected to a sewage system or a septic tank and then is not moved after it is first connected to that sewage system or septic tank; but
	 does not include a building or structure erected or placed on land in contravention of the <i>Development Act 1993</i> or a corresponding previous enactment. The definition of building applies to schools, hospitals and prisons, which are not included in the definition of Infrastructure in accordance with the <i>Native Vegetation Regulations 2017</i> (but are included in the definition of public infrastructure in the <i>Development Act 1993</i>).
Canoe tree	A tree with scars that indicate where Aboriginal people have cut out a portion of the tree for a canoe. May also be referred to as a Scarred tree.
Carriageway	That portion of a road or bridge devoted particularly to the use of vehicles, that is between guide posts, kerbs, or barriers where these are provided, inclusive of shoulders and auxiliary lanes (refer to the department's Operational Instruction 20.1 Care, Control & Management of Roads (Highways) by the Commissioner of Highways).
Clearance	Clearance means the killing, destruction or removal of vegetation; severing of branches limbs, stems or trunks of vegetation; burning of vegetation; any other substantial damage to vegetation. Pruning and removal are forms of vegetation clearance.
Clearance envelope	Area above the road or rail that should be clear of obstructions at all times to allow the safe passage of legal dimension vehicles (<i>Road Traffic Act 1961</i>) and the safe use of electrified and non-electrified rail lines.
Clear zone	An area kept free of non-frangible objects (including trees) that present a hazard to errant vehicles.
Declared plant	A weed that is regulated under the <i>Natural Resources Management Act 2004</i> due to its threat to primary industry, the natural environment and/or public safety. Plants are declared under the provisions of the Act relating to their movement, sale, notification and control. Landowners, including government agencies, are required to control declared plants. The Natural Resources Management Boards have responsibility for administering and managing the control of declared plants on road reserves.
Environmental Impact Assessment Report (EIAR)	Documentation of the evaluation of the environmental impact of a project, including objectives, alternatives, effects on the environment and the mitigation and management of those effects.
Environmental weeds	Native or exotic species that invade and degrade native vegetation.
External approvals	Approvals from external authorities to meet the requirements of the Aboriginal Heritage Act 1988, Development Act 1993, Environment Protection and Biodiversity Conservation Act 1999, Heritage Places Act 1993, and Native Vegetation Act 1991.
Hazard	Something that has the potential to cause harm. In the context of the department's activities, harm is generally regarded as bodily harm (death or serious injury), and damage to property.

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Immediate hazard	Vegetation is considered to be an immediate hazard if: there is an immediate danger that a tree or limb will fall because of disease, damage or any other
	cause; and
	 there is a real and unacceptable risk of personal injury or damage to property if that occurs; and
	 the state of the tree has been assessed by a person with expertise in the area of plant health, or by any other person acting in an emergency situation or in any other situation that gives rise to an immediate risk of personal injury or damage to property; and
	the clearance is confined to removing the limb or other part of the plant causing the danger and only extends to total removal of the tree if that is necessary to remove the existing immediate danger.
Infrastructure	The definition of Infrastructure in the Native Vegetation Regulations 2017 means—
	 infrastructure, equipment, structures, works and other facilities used in or in connection with the supply of water or electricity, gas or other forms of energy, the provision of telecommunications, or the drainage, removal or treatment of waste water or sewage;
	roads and their supporting structures and works;
	ports, wharfs, jetties, railways, tramways and busways;
	flood mitigation works;
	■ an airstrip;
	a shipping channel; or
	 a public reservoir. The definition of Public Infrastructure in the <i>Development Act 1993</i> (Division 3, Section 49) includes, in
	addition to that listed above:
	schools, hospitals and prisons; and
	 all other facilities that have traditionally been provided by the State (but not necessarily only by the State) as community or public facilities.
Internal approvals	Approval from the General Manager, Infrastructure Delivery, Senior Environmental Advisor in accordance with the Vegetation Removal Policy. Internal approvals may be a delegated approval under the Native Vegetation Act.
Knet	The department's electronic records management system.
Low impact method	A low impact method of vegetation clearance means selective control, minimal ground disturbance, cutting cleanly rather than breaking branches, slashing, trimming, or mowing. Low impact methods reduce soil disturbance and potential weed invasion.
Major prune	Removal of limbs or severing roots greater than 10% of the biomass of the tree.
	Major pruning of regulated or significant trees is considered a 'tree damaging activity' under the Development Act 1993 if it removes more than 30% of the crown of the tree.
	All tree pruning is to be undertaken in accordance with Australian Standard (AS) 4373 Pruning of Amenity Trees.
Minor prune	Removal of limbs or severing roots not affecting the health of the vegetation (e.g. less than 10%) is considered minor and does not require approval, except when pruning a site of Aboriginal significance. All tree pruning is to be undertaken in accordance with Australian Standard (AS) 4373 Pruning of Amenity Trees.
Mitigation hierarchy	For clearances in accordance with the <i>Native Vegetation Regulations 2017 Division 5 – Risk assessment</i> (i.e. those listed in Schedule 1, Part 6, such as Works on behalf of the Commissioner of Highways; New dwelling or building works, or Infrastructure works), the mitigation hierarchy must be applied:
	 Avoidance – measures should be taken to avoid clearance of native vegetation wherever possible.
	 Minimisation – if clearance cannot be avoided, measures should be taken to minimise the duration, intensity and extent of impacts of the clearance on biological diversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).
	 Rehabilitation or Restoration – measures should be taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been destroyed, by impacts of clearance of native vegetation that cannot be avoided or minimised.
	 Offset – any adverse impact on native vegetation or ecosystems that cannot be avoided or further minimised should be offset by the achievement of a significant environmental benefit that outweighs that impact.

Native vegetation	A plant or plants of a species indigenous to South Australia including:
	 A plant or plants growing in or under waters of the sea; dead trees with trunk diameter >600mm, measured at 300mm above natural ground level, which
	provide habitat for threatened species listed under the EPBC Act.
	Also includes vegetation that was sown or planted to comply with a condition of clearance approval under the Native Vegetation Act.
Non-frangible vegetation	Plant species with a stem diameter (at maturity) of 100 mm or greater with rigid, large or sturdy stems which will not readily break, bend or crash upon impact by a typical passenger vehicle, and which could be expected to inflict significant damage to the vehicle and possibly cause injury to vehicle occupants.
Pastoral areas of South Australia	As defined in the Native Vegetation Council <i>Guide for applications to clear native vegetation – Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017</i> , pastoral areas are those within the following Natural Resources regions: SA Arid Lands and Alinytjara Wilu <u>rara</u> .
Project Impact Report/ Environmental Report	For major projects the environmental impact assessment is included in the planning process and documented in the Project Impact Report or the Environment Report.
Project Manager	The person responsible for the delivery and management of a project, including ensuring that vegetation removal approval has been obtained.
Pruning	Pruning includes damaging or severing of roots and/or branches. Pruning is a form of vegetation clearance, see above definition. All tree pruning is to be undertaken in accordance with Australian Standard (AS) 4373 Pruning of Amenity Trees.
Roadside infrastructure	Includes roadside assets such as culvert headwalls, as well as road furniture, which is a general term covering all signs and devices for the control, guidance and safety of traffic, and the convenience of road users (for example signs, guide posts, safety barriers).
Regulated tree	A tree (within the designated area set out in Part 2, Section 6A (3) of the <i>Development Regulations 2008</i> that has a trunk with a circumference of 2 m or more or, in the case of trees with multiple trunks, that have trunks with a total circumference of 2 m or more and an average circumference of 625 mm or more, measured at a point 1m above natural ground level. Note the measurement of the circumference of the trunks of a tree with multiple trunks is to be undertaked on the basis of the actual circumference of each trunk and without taking into account any space between the trunks.
	Exclusions from the above regulated tree definition are set out in Part 2, Section 6A (5) of the Development Regulations 2008.
	A tree is also considered a Regulated tree if it is declared to be a significant tree, or a tree within a stand of trees declared to be significant trees, by a Development Plan (whether or not the tree is also declared to be a regulated tree, or also falls within a class of trees declared to be regulated trees, by the regulations). That declaration overrides the definition (and exclusions) in the Development Regulations.
Rail infrastructure	As defined in the <i>Rail Safety National Law (South Australia) Act 2012</i> : The facilities that are necessary to enable a railway to operate and includes— (a) railway tracks and associated railway track structures; and (b) service roads, signalling systems, communications systems, rolling stock control systems, train control systems and data management systems; and
	(c) notices and signs; and(d) electrical power supply and electric traction systems; and
	(e) associated buildings, workshops, depots and yards; and
	(f) plant, machinery and equipment,
	but does not include—
	(g) rolling stock; or
	(h) any facility, or facility of a class, that is prescribed by the national regulations not to be rail infrastructure.
Scarred trees	Trees with markings or scars, which have been used by Aboriginal people to make canoes or other

Significant Environmental Benefit (SEB)	In accordance with the Native Vegetation Council <i>Policy for a Significant Environmental Benefit – Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017</i> , an SEB is an action that results in a positive impact on the environment that is over and above the impact of approved vegetation clearance. It can be achieved through the establishment (revegetation), management and/or protection of an area of native vegetation. The achievement of an SEB is a condition of approval for clearance of native vegetation under the <i>Native Vegetation Act 1991</i> to compensate for the loss of that native vegetation.
Significant tree	A tree (within the designated area set out in Part 2, Section 6A(3) of the <i>Development Regulations 2008</i>) that has a trunk with a circumference of 3 m or more or, in the case of a tree with multiple trunks, has trunks with a total circumference of 3 m or more and an average circumference of 625 mm or more, measured at a point 1m above natural ground level. Note the measurement of the circumference of the trunks of a tree with multiple trunks is to be undertaken on the basis of the actual circumference of each trunk and without taking into account any space between the trunks.
	Exclusions from the above regulated tree definition are set out in Part 2, Section 6A(5) of the Development Regulations 2008.
	A tree is also considered a Significant tree if it is declared to be a significant tree, or a tree within a stand of trees declared to be significant trees, by a Development Plan (whether or not the tree is also declared to be a regulated tree, or also falls within a class of trees declared to be regulated trees, by the regulations). That declaration overrides the definition (and exclusions) in the Development Regulations.
Travelled way	That portion of a carriageway ordinarily assigned to moving traffic, and exclusive of shoulders and parking lanes. It is defined by a marked edge line or where no edge lines exist is the edge of seal or 3.5 m from the centre of the road for total seal widths greater than 7.0 m. It includes a bicycle lane where adjacent to a traffic lane.
Tree	For the purpose of this Policy, the department defines a 'tree' as a plant with a butt diameter of 0.15 m or greater measured at 1 m above the natural ground level, or for multi-stemmed trees, with one or more stems with a butt diameter 0.1 m or greater measured at 1 m above natural ground level (see Table 3.1 for where this definition is applied).
	For Native Vegetation assessments, 'scattered trees' are defined by the <i>Scattered Tree Clearance Assessment guidelines</i> as naturally occurring indigenous trees, usually two or more metres in height* that occur over little or no native understorey.
	* This can vary depending on the species and habit. In some instances trees < 2 m may be considered scattered trees, and some >2 m may still be classed as saplings.
	For 'regulated/significant trees' and 'native vegetation' (including dead trees), see above definitions.
Vegetation assessment	Documents the nature and significance of the vegetation potentially affected by a project. It is undertaken at the planning stage of projects to enable planning decisions to be made on the impact of design options on the vegetation and habitat, in accordance with environmental requirements.
Vegetation removal	Includes any activity that impacts or causes the destruction of whole trees, shrubs and understorey species. Removal includes tree felling, mowing, slashing, grading, spraying or filling over vegetation. Vegetation removal is a form of vegetation clearance, see above definition.
Vegetation survey	Documents the nature and significance of the vegetation that is, or may be, affected by the works and is required to be protected, removed or pruned.

1 Introduction

This Vegetation Removal Policy outlines the responsibilities of the Department of Planning, Transport and Infrastructure (DPTI) in relation to activities affecting vegetation. The Policy details the procedures for obtaining approvals associated with vegetation removal and outlines the requirements for remediation measures.

Vegetation clearance includes pruning, removal or any other activity that impacts or causes the destruction of vegetation.

This Policy applies to all departmental activities and/or departmental managed properties including road, rail, marine and buildings. It does not apply to developer-funded projects or to work undertaken by service providers/authorities within the department's road or rail reserves.

This Policy also forms the department's Standard Operating Procedure (SOP) approved by the Native Vegetation Council (NVC) in accordance with the *Native Vegetation Act* 1991 (NVA).

1.1 Background

Remnant native vegetation

Due to extensive clearing of native vegetation in the State's agricultural regions, transport corridors have become important refuge areas for the continued survival of the remaining vegetation and associated fauna. In some parts of the State only a fraction of the original native vegetation remains.

Protecting the remaining native vegetation, particularly in transport corridors, is essential for the conservation and protection of our native fauna and flora species. Native vegetation has a number of other important functions including protecting water catchments and conserving topsoil.

Planted vegetation

Planted vegetation fulfils both functional and aesthetic roles in urban and rural environments. Street trees and other landscape plantings not only improve the visual amenity of our cities and towns but can also have important cultural or heritage associations (e.g. memorial avenues or trees planted to mark a special occasion). Landscape plantings provide screening between the road or rail and adjacent properties and provide shade for users of the transport system.

Revegetation works can assist with erosion control, reduce weed invasion, provide habitat for native fauna, and improve water quality in constructed wetlands or riparian corridors.

Vegetation planted as Significant Environmental Benefit (SEB) offset for native vegetation is defined as 'native vegetation' in accordance with the NVA. As such, it is to be treated as native vegetation under this policy, particularly with regard to approval and replacement rates.

2 Legislative and policy requirements

2.1 Policy principles

The State Government, through the NVA, is committed to conservation, protection and enhancement of the native vegetation of the State and, in particular, remnant native vegetation, in order to prevent further:

- reduction of biological diversity and degradation of the land and its soil;
- loss of quality and quantity of native vegetation in the State; and
- loss of critical habitats.

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The department supports and contributes to State and Commonwealth strategies for the protection of biodiversity whilst providing a safe and efficient transport system. These strategies include:

- Australia's Biodiversity Conservation Strategy
- South Australia's Strategic Plan
- State and Regional Natural Resources Management Plans.

Vegetation protection objectives

Through its planning, development, maintenance and operation of infrastructure and buildings, the department undertakes to meet the following objectives:

- to comply with all relevant legislation
- to avoid or minimise the loss of native vegetation and other significant vegetation whilst providing a safe operating environment for users of the system
- to ensure that there is no net loss of native and amenity vegetation associated with its activities, and when legally required, to provide a significant environmental benefit.

2.2 Legislative requirements

Any vegetation removal by the department must be compliant with legislation including:

- Native Vegetation Act 1991 and Native Vegetation Regulations 2017
- Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
- Development Act 1993 and Development Regulations 2008
- Natural Resources Management Act 2004
- Aboriginal Heritage Act 1988
- Local Government Act 1999
- Highways Act 1926
- Rail Commissioner Act 2009
- Fire and Emergency Services Act 2005.

a) Native Vegetation Act 1991

The Native Vegetation Act 1991 (NVA) provides for the management, enhancement and protection of native vegetation in South Australia. The Act is administered by the Native Vegetation Council (NVC) with the support of the NVC Delegate (Department of Environment, Water and Natural Resources (DEWNR) Native Vegetation Branch (NVB)) and the Native Vegetation Assessment Panel (NVAP).

The NVA applies to the clearance of terrestrial and marine native vegetation ("a plant or plants of a species indigenous to South Australia including a plant or plants growing in or under waters of the sea") in all areas of the state, except defined parts of the Adelaide metropolitan area. It applies to the Hills Face Zone and areas designed as part of the Metropolitan Open Space System (MOSS). Refer to Appendix A for a map of where the NVA applies near Adelaide.

Native vegetation must not be cleared unless approval is granted by the NVC in accordance with Section 29 of the Act or it is permitted under the *Native Vegetation Regulations 2017*. The relevant Regulations require that clearance is undertaken in accordance with a Standard Operating Procedure (SOP) or a Management Plan that has been approved by the NVC.

This *Vegetation Removal Policy* forms the department's SOP approved by the NVC under the NVA. This Policy provides the procedures for obtaining approvals associated with vegetation removal and outlines the requirements for remediation measures.

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An application to clear vegetation must include a description of the vegetation to be impacted and, where an offset is required, the method of delivering the offset.

For further information refer to the DEWNR website: http://www.environment.sa.gov.au/managing-natural-resources/native-vegetation

b) Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) applies to any action which is likely to have a significant impact on a Matter of National Environmental Significance. There are nine Matters of National Environmental Significance that act as "triggers" for the Commonwealth assessment and approval process. Matters potentially affecting vegetation include:

- world heritage properties
- nationally threatened species and/or ecological communities
- wetlands of international importance i.e. Ramsar Wetlands
- migratory species
- national heritage places
- Commonwealth marine areas.

Approval may be required if species or places listed under the Act are affected, refer to the Australian Government's Department of the Environment and Energy (DoEE) website.

For the purpose of maintenance activities, Section 43B of the EBPC Act should be considered. Under Section 43B if the impacts are not considered significant and the action is a lawful continuation of use of land continuing immediately before commencement of the Act (i.e. prior to 16 July 1999 when the Act was commenced) works do not require consent with the exception of enlargement, expansion or intensification of use (Knet #5601529).

The approval process under the EPBC Act will vary depending on the nature of the project and the level of assessment required. For more information refer to the DoEE website http://www.environment.gov.au/epbc, and the DPTI Guide to Matters of National Environmental Significance available at https://www.dit.sa.gov.au/standards/home

c) Development Act 1993

The *Development Act 1993* requires that approval be sought prior to undertaking a 'tree damaging activity' in relation to 'Regulated' trees (including 'Significant' trees) in an area subject to the Act or for any development that will affect a registered State Heritage Place. A State Heritage Place may include a garden or trees. Approval is required from the Development Assessment Commission (DAC).

For the majority of projects undertaken by the department, the DAC is the relevant authority for determining applications for consent to clear regulated and significant trees under the *Development Act* 1993. The DAC is serviced by the Development Assessment section of the department.

The controls for regulated and significant trees apply to all parts of Metropolitan Adelaide (refer to the *Development Regulations 2008* for detailed description of where the Act applies, also see Appendix B for a map). DAC approval to impact a Regulated tree is not required in some circumstances, refer to Section 3.3 for details of exemptions. Internal DPTI approval may still be required. For further information refer to the regulated and significant tree information on the <u>SA Government planning and property portal</u>.

A Crown Development application form is available online at https://plan.sa.gov.au/resources/forms/crown_development_application_form

d) Natural Resources Management Act 2004

The *Natural Resources Management Act 2004* promotes sustainable and integrated management of the State's natural resources, making provisions for the protection of the State's natural resources. This Act lists declared plants and provides for their control.

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e) Aboriginal Heritage Act 1988

Aboriginal sites, objects and remains are protected under the *Aboriginal Heritage Act 1988*. Section 23 of the Act makes it an offence to damage, disturb or interfere with any Aboriginal site, object or remains without the prior authority of the Minister for Aboriginal Affairs. Aboriginal 'scarred trees' and 'canoe trees', including dead trees, are sites of Aboriginal significance and therefore may not be pruned or removed without prior approval under the Act. For more information refer to the *Cultural Heritage Guidelines* (Knet #1093752).

f) Local Government Act 1999

Within local government districts, public roads are generally vested in the local council. The Commissioner of Highways may assume care, control and management of part or all of the road by virtue of the provisions of the *Highways Act 1926* (Section 26 notice or Section 30A declaration). Section 221 of the Local Government Act requires that a person without some other statutory authority (e.g. Section 26 notice) must not make an alteration to a public road unless authorised to do so by the council. This includes planting a tree or other vegetation, interfering with vegetation, or removing vegetation.

g) Highways Act 1926

The Commissioner of Highways may assume care, control and management of part or all of the road by virtue of the following provisions of the *Highways Act 1926*:

- a notice pursuant to Section 26(3) (only that part of the road defined in the notice itself and relevant portions of the department's Operational Instruction 20.1 Care, Control & Management of Roads (Highways) by the Commissioner of Highways (Operational Instruction 20.1)), or
- a declaration proclaimed by the Governor pursuant to Section 30A that any road or part of any road or land acquired by the Commissioner is a controlled-access road, or
- a vesting of the road in the Commissioner for an estate in fee simple pursuant to Section 21A.

Under Section 26 of the Highways Act, the Commissioner of Highways assumes some of the powers and responsibilities given to councils under Part 2, Chapter 11 of the *Local Government Act 1999* in relation to roads under the Commissioner's care, control and management. This may include the council's powers under Section 221 of the *Local Government Act 1999* to make alterations to a public road, including planting a tree or vegetation or interfering with/removing vegetation on/from the road. In determining whether the Commissioner of Highways has responsibility for maintaining vegetation along roads it is necessary to check the relevant Section 26 Notice and refer to Operational Instruction 20.1. On a limited number of roads the Commissioner has assumed responsibility for managing the full width of the road (e.g. SE Freeway). The responsibility for declared weed control still falls with the Natural Resources Management Boards in accordance with the *Natural Resources Management Act 2004*.

Operational Instruction 20.1 (available online at http://www.dpti.sa.gov.au/documents/tass) serves two purposes:

- to inform both DPTI personnel and Councils of the standard management and maintenance activities that DPTI is required to undertake as an agent of the Commissioner on roads under the care, control and management of the Commissioner, and
- in conjunction with Section 26(7) notices issued to Councils for roads under the care, control and management of the Commissioner, to advise Councils of the powers that they may continue to exercise under Part 2 of Chapter 11 of the Local Government Act 1999 on these roads.

Section 26A of the *Highways Act 1926* enables the Commissioner to remove or cut back any tree or vegetation on or overhanging a road under the Commissioner's care, control and management, or an adjoining portion of road, 'for the purposes of road safety'. However, all other legislative requirements (discussed above) must also be satisfied prior to any vegetation removal.

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h) Rail Commissioner Act 2009

Under Part 2, Division 3, Section 10 of the *Rail Commissioner Act 2009*, the Rail Commissioner may, subject to the approval of the Minister for Transport, carry out such works as the Commissioner thinks fit in relation to the construction, commissioning and maintenance of rail infrastructure. This gives the Commissioner the power to carry out works, including the maintenance of vegetation.

More specifically, Part 2, Division 3, Section 9(1)(c) of the Rail Commissioner Act provides that the Rail Commissioner may remove or cut back any tree or other vegetation on or overhanging rail infrastructure. This includes instances where the overhanging vegetation is growing on private land. Under Section 8(1)(d) a person authorised by the Rail Commissioner may enter rail premises or any other land or premises to do any thing necessary for the performance of the functions or the exercise of the powers of the Commissioner (including removing vegetation). However, notification must be given in accordance with Section 8 of the Act prior to entering the land.

It should be noted that "rail infrastructure" does not include the whole rail corridor – it is defined in the Rail Safety National Law (South Australia) Act 2012 (also refer to Glossary).

As with the Highways Act, it may also be necessary to seek approval under the Native Vegetation Act, EPBC Act, Development Act, or Aboriginal Heritage Act.

i) Fire and Emergency Services Act 2005

The *Fire and Emergency Services Act 2005* sets out responsibilities for the control of vegetation in order to prevent, control and suppress fires.

3 Approval requirements

This section provides a guide for determining vegetation clearance approval requirements in relation to common departmental activities affecting vegetation. Figure 3.1 summarises the process for identifying and obtaining vegetation removal approval, both internal and external.

Where approvals to remove vegetation are required, a request should be submitted via a Vegetation Removal Request Form¹ (refer to Knet #8558923 for a copy of the standalone form) to the Senior Environmental Advisor (SEA) or the Principal Environmental Advisor (PEA) for endorsement (refer Table 3.1 for approval requirements). Details of the vegetation type, quality and value should accompany the form and are usually documented in a Vegetation Survey or Vegetation Assessment, depending on the type of works.

Table 3.1 details approval requirements by legislation and activity type for works involving vegetation clearance. The table identifies when approval is required, the relevant approving authorities (both internal and external), and whether any replacement or remediation work is required as a condition of approval. More than one legislative approval may be required for the removal of vegetation and as such the whole table should be consulted. Where an activity is not covered in the table, advice on approval requirements should be sought from the SEA or PEA.

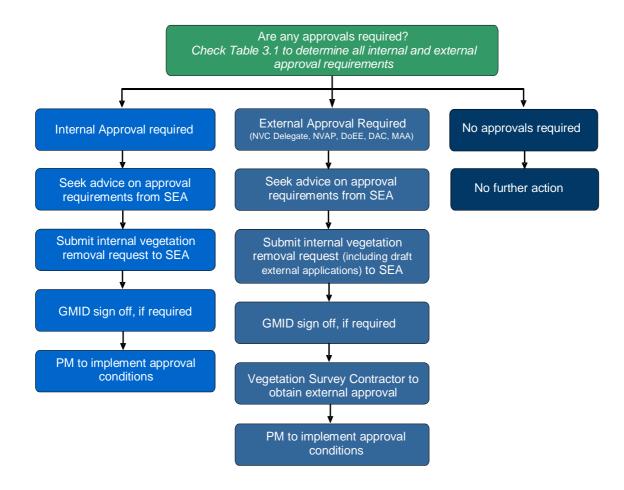
The relevant Local Government Authority shall be consulted with prior to vegetation removal, except where the vegetation is to be removed as an immediate hazard, from the department's controlled access roads, or from roads that are vested in the Commissioner of Highways. This notification is a requirement stipulated in the department's Operational Instruction 20.1.

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¹ Note: If a vegetation survey has been prepared and documented using the DPTI Vegetation Survey template, the Vegetation Removal Request Form will be attached to the survey

Figure 3.1 Procedure for obtaining vegetation removal approvals



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(Note: All sections of the table should be reviewed to determine all approval requirements)

		IMPA	ACT, APPROVAL AUTHORI	TY & SEB/C	OFFSET		
ACTIVITY	VEGETATION DESCRIPTION	IMPACT LEVEL		REMOVAL		MAJOR PRUNE (No Approvals or offsets for Minor Pruning)	
		Agricultural	Pastoral ²	Approval	SEB/ Offset	Approval	SEB/ Offset
Vhere Pruning or Removal is associated with the following ctivities:	Escalating factors for each Level are described in Table 3.2.	Level 1 Patches – 500 m² (0.05 ha) or less AND/OR Scattered Trees – 5 trees or less Both the Area and Scattered Trees cannot include any trees with a trunk circumference of 500 mm or more measured at 1 m above the ground	Level 1 Patches – 3 ha or less AND/OR Scattered Trees – 5 trees or less Both the Area and Scattered Trees cannot include any trees with a trunk circumference of 300 mm or more measured at 1 m above the ground	SEA	Fixed \$500	SEA	Fixed \$5
NVA Section 25 Guidelines relating to vegetation management for public safety Category 1 or 2 requirements (in accordance with Native Vegetation Regulation 11 (23)) (e.g. trees close to the road but outside the Clearance Envelope and/or within the designated clear zone).	Scattered Trees and/or Areas Note This includes Dead Trees with a trunk circumference equal to or greater than 1 m (for trees on Kangaroo Island) or 2 m (for all	Level 2 Patches – greater than 0.05 ha but less than or equal to 0.5 ha AND/OR Scattered Trees – 20 trees or less	Level 2 Patches – greater than 3 ha but less than or equal to 10 ha AND/OR Scattered Trees – 20 trees or less	PEA	Refer Section 6.1	PEA	Refer Section 6
	other trees) measured at 300 mm above natural ground level AND that provide habitat for threatened species listed under the EPBC Act. Refer NV Info Sheet No. 28 for more details.	Level 3 Clearance beyond Level 2 AND Total Biodiversity Score – less than or equal to 250	Level 3 Clearance beyond Level 2 AND Total Biodiversity Score – less than or equal to 2500	PEA & NVC Delegate (NVB)	Refer Section 6.1	PEA & NVC Delegate (NVB)	Refer Section
		Level 4 Clearance beyond Level 2 AND Total Biodiversity Score – greater than 250	Level 4 Clearance beyond Level 2 AND Total Biodiversity Score – greater than 2500	GMID & NVAP	Refer Section 6.1	GMID & NVAP	Refe Section
PRUNING¹ OR REMOVAL UNDER NVA SECTION 25 GUIDELIN MANAGEMENT FOR PUBLIC SAFETY (IN ACCORDANCE WITH REGULATION 11 (23)): SEE SECTION 4 FOR FURTHER INFORMATION Category 1: Clearance for the establishment of safe sight intersections and rail crossings.	H NATIVE VEGETATION	Level 1 to 4 impacts		PEA	2:1 (SEB not required under NVA)	PEA	Not Requir
Category 2: Clearance of non-frangible trees/vegetation in HAZARD to errant vehicles leaving the road. On sealed roads with a speed limit of ≤80 km/hr: clear way AND mitigation hierarchy has been applied. On sealed roads with a speed limit of >80 km/hr: clear way AND mitigation hierarchy has been applied. On unsealed roads: clearance up to 2 m either side of	ance within 2 m from edge of travelled ance within 3 m from edge of travelled the edge of the grader line (capped at a	Agricultural Levels 1 and 2 Patches – less than or equal to 0.5 ha AND/OR Scattered Trees - 20 trees or less	Pastoral Levels 1 and 2 Patches – less than or equal to 10 ha AND/OR Scattered Trees - 20 trees or less	PEA	2:1 (SEB not required under NVA)	PEA	Not Requir
total width including the travelled way itself of up to 12 applied.	m) AND mitigation hierarchy has been	Level 3 Clearance beyond Level 2 AND Total Biodiversity Score – less than or equal to 250	Level 3 Clearance beyond Level 2 AND Total Biodiversity Score – less than or equal to 2500	PEA & NVC Delegate (NVB)	2:1 (SEB not required under NVA)	PEA & NVC Delegate (NVB)	Not Requir
		Level 4 Clearance beyond Level 2 AND Total Biodiversity Score – greater than 250	Level 4 Clearance beyond Level 2 AND Total Biodiversity Score – greater than 2500	GMID & NVAP	2:1 (SEB not required under NVA)	GMID & NVAP	Not Requir
Category 3: Clearance beyond Category 1 and Category 2	zones.	Level 1 to 4 impacts		GMID & NVAP	SEB may be required - refer NVC Guidelines If not, Offset 2:1	GMID & NVAP	SEB may required - NVC Guidelin If not,
PRUNING OR REMOVAL: Where Pruning or Removal is associated with the following activities: • Maintaining Clearance Envelopes • Maintaining appropriate sight distance to signs/signals, hazards and around curves to ensure drivers travelling at posted speeds have sufficient time to react (road and rail) • Maintaining safe intersection sight distance (road and rail) • Maintenance/protection and repair of infrastructure only if undertaken in accordance with the department's Maintenance Specification and this Vegetation Removal	isituations: g regrowth within the clearance envelope ad culverts, around road/ railside fixtures and edge of shoulder and in turnouts, drains an s has previously been established; and desig etc if undertaken in accordance with Mainte e) may be pruned up to an additional 2.0 m l East region, Coastal Wattle can be cleared tion 8 (16) and the NVC's Native Vegetation	d culverts; in areas where clearance gnated stacking sites, borrow pits, nance Specification and this beyond the defined clearance to the property boundary in	Not Required (As long as using Low Impact Method)	Not Required	Not Required	Not Require	
 Policy Property maintenance, including replacement of existing fences³ Marine dredging with dredge spoil disposal to an area previously impacted by departmental dredging activity Where Vegetation is: causing damage to infrastructure (or rendering infrastructure 				SEA	Not Required unless impact deemed significant (2:1 offset)	Not Required	Not Requir
 unable to function as required), or structurally unsound and poses a real safety risk to person or property 	stemmed, measured at 1 m above the the NPW Act.	ve a trunk diameter equal to or greater than natural ground level AND that provide habita		SEA	2:1	Not Required	Not Require
Emergency Works Urgent works to remove or rectify an immediate hazard &/or To repair/protect transport infrastructure in an emergency situation No approval or offset is required for any other dead vegetation. Removal of trees (including dead trees) with trunk diameter equal to or greater than 150 mm, or 100 mm for multi-stemmed, measured at 1 m above the natural ground level, except for an Aboriginal culturally modified tree.			DPTI Officer (advise SEA after removal)	Not Required	DPTI Officer (advise SEA after removal)	Not Requir	

Table 3.1 Legislative and Approval red	ote : the Native Vegetation Act normally** takes precedence over the	Davidanment Ast therefore vegetation which is	covered by beth A	ete only requires	approved under the	NI\/A\		
DEVELOPMENT ACT, 1993 (No	ote : the Native Vegetation Act normally** takes precedence over the	Development Act, therefore vegetation which is		• •		,		
	ACTIVITY	DESCRIPTION	Approval	OVAL Offset	MAJOR PRU Approval	Offset		
Pruning or removing vegetation incidental to: New works (refer Section 4.1)		Regulated Tree	SEA (or GMID) ² and DAC	2:1	SEA (or GMID) ² and DAC	Not Required		
Maintenance (refer Section 4.2) Approval is required if pruning or removing:	a sa described under the Ast and Degulations	Regulated Significant Tree	SEA (or GMID) ² and DAC	3:1	SEA (or GMID) ² and DAC	Not Required		
 A tree declared as Significant, or a tree within Development Plan, and/or 	e as described under the Act and Regulations, n a stand of trees declared to be Significant trees, in the local Government	Dead Tree (meeting DAC size requirements)	N/A	N/A	N/A	N/A		
	tate Heritage Place or is listed on the State Heritage Register & BIODIVERSITY CONSERVATION ACT	Г. 1999 (EPBC Act)						
Pruning or removing vegetation subject to the EBPC An New works (refer Section 4.1) Maintenance (refer Section 2.2 to determine if the action	ct incidental to: is a lawful continuation of use of the land, and Section 4.2 for maintenance are t impact on a Matter of National Environmental Significance, as listed under the gical Communities	ctivities)		OVAL er for Environment onwealth)	OFF : Refer to Section EPBC (6.3 for guide to		
ABORIGINAL HERITAGE ACT,	, 1988							
Pruning or removing vegetation subject to the Aborigin New works (refer Section 4.1) Maintenance (refer Section 4.2) Approval required if pruning or removing a site of Aborigina emergency works)	nal Heritage Act incidental to: I significance, e.g. a culturally modified tree such as a 'scarred tree' or a 'cand	pe tree', <u>including dead trees</u> for any works (including		ROVAL R <u>(before</u> removal)	OFF Refer Se AAR may spe requirements as	ction 6.1 cify additional		
WEEDS & OTHER SELF-SEED	ED VEGETATION (Natural Resources Manage	ement Act, 2004 & DPTI Environme	ntal Weeds Li	<u>st</u>)				
Pruning or removing vegetation that is a declared plant	t under the NRM Act or a DPTI listed environmental weed or self-seeded	vegetation (excluding native vegetation)	NEW V	VORKS al or offset	MAINTE No approva			
	vals are only required for pruning or removing a declared plant under the NRM Act or a DPTI listed environmental weed in the following circumstances. Offsets are only required for				State Heritage listed trees Approval – SEA & DAC; Offset – In accordance with DAC offset requirements			
 Vegetation listed on SA Heritage Register and/ 	or in a Local Government Development Plan,			sted trees or Contri Offset – 1:1	butory Items			
 Vegetation part of an amenity planting, including 	ng windbreaks, and/or	and/or Approval – SEA Off Offset – 1:1 impact		Offset – Not Reimpact deemed to offset, SEA	Approval – SEA Offset – Not Required unless impact deemed to be significant (1: offset, SEA discretion) ³			
Adverse public opinion may be raised, including Local Government				Approval – GMID Offset – 1:1 Offset, GMID impact deemed to be signif offset, GMID discretic		equired unless be significant (1:		
Pruning or removing of any <u>dead trees or plants</u> , which a	re declared under the NRM Act; or a DPTI listed environmental weed; or self-	seeded vegetation (excluding native vegetation) requir	es no approvals or of	fsets.				
AMENITY VEGETATION (refer to	o Glossary for definition of Amenity Tree and Amer	nity Value of Vegetation)						
Pruning or removing of amenity vegetation incidental to New Works (refer Section 4.1)	The vegetation is part of an amenity planting, including windbreaks. <u>All am</u> approval and an offset	enity vegetation, regardless of size, requires	Approv	al – SEA	Offset remova	Plants - 1:1		
	Additional approvals are required for amenity vegetation if adverse public of	opinion (including Local Government) may be raised	Approva	al – GMID	(no offset for pru veget			
Pruning or removing of amenity vegetation incidental to Maintenance (refer Sections 4.2)	Amenity Vegetation Examples: is structurally unsound and poses a real sa infrastructure; is in sight lines; is in the Clearance Envelope; is assessed as Clearance Envelope		Approval – SEA for whole tree					
Pruning or removing of amenity vegetation incidental to Emergency Works		Approval Maintenance Officer or DPTI Officer (advise SEA after removal) deemed to be significated SEA discretion SEA discretion						
Pruning or removing of any <u>dead amenity</u> vegetation and/	or any self-seeded plants originating from amenity vegetation requires no app	rovals or offsets.						
NATIVE VEGETATION NOT SU	JBJECT TO THE NATIVE VEGETATION	ACT (e.g. remnant trees outside N	VA area)					
Pruning or removing of vegetation incidental to New works (refer Section 4.1)	The area of native vegetation being removed is < 500 m ²	O2	Consider as Am	enity Vegetation a	nd Approve and Offs	set as per above		
NB. If the extent of impact or size of vegetation doesn't meet the described requirements, the vegetation is still	The area of native vegetation being removed is equal to or greater than 50. The native tree has a trunk diameter equal to or greater than 150 mm, or 1 the natural ground level.					: – Area – 2:1 ants – 2:1		
likely to be considered Amenity Vegetation; Approvals and Offsets as per Amenity Vegetation.	Additional approvals are required for native vegetation if adverse public op	inion (including Local Government) may be raised	Approva	al – GMID	. FiaillS			
Pruning or removing of native vegetation incidental to Maintenance (refer Sections 4.2 & 4.3)	The native tree has a trunk diameter equal to or greater than 150 mm, or 100 mm for multi-stemmed, measured at 1 m above the natural ground level and (for example) is structurally unsound and poses a real safety risk to person or property; is causing damage to infrastructure; is in sight lines; is in the Clearance Envelope; is assessed as an non-frangible road side hazard Approval – SEA for whole tree removal only outside the Clearance Envelope Not Required to provide the Clearance Envelope			unless impact				
Pruning or removing of native vegetation incidental to Emergency Works	Removing a native tree with trunk diameter equal to or greater than 150 mi above the natural ground level, except for an Aboriginal scarred tree or car		Maintenance Office	roval cer or DPTI Officer after removal)				
Pruning or removing <u>dead native trees</u> (not subject to NV natural ground level <u>AND</u> provides habitat for threatened s	•	for multi-stemmed, measured at 1 m above the	Approv	al – SEA	Offset	: – 2:1		

Pruning or removing of all other <u>dead native trees/plants</u> (not subject to NVA) requires no approvals or offsets

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The Development Act does not apply to land that has been acquired under S20 of the *Highways Act 1926*, except as described in Section 2.2 of this document.

Internal approval is still required when pruning more than 10% of a tree crown.

**If a Local Government Council declares in its Development Plan a tree to be "Significant", which is also covered by the *Native Vegetation Act*, both Acts may apply. Refer to Section 3.3 for more information.

See Section 3.1 for details of when the GMID would be the required approver. Refer to Section 6 for a details of when a 2:1 offset would be applied.

3.1 General Manager, Infrastructure Delivery (GMID) vegetation removal approvals

Internal vegetation removal approval from the General Manager, Infrastructure Delivery (GMID) is required for the following categories of projects (which may also require external approvals):

- major projects,
- projects that will require financial expenditure for vegetation offset of over \$330 000, and/or
- projects that have the potential to generate significant community concern (including Local Government).

In addition, GMID approval is required prior to submission of the following external approvals:

- Level 4 native vegetation applications,
- EPBC applications with an offset of over \$330 000 (internal sign off for EPBC approvals based on offset cost, i.e. Manager, Technical Services for projects with an offset between \$110 000 and \$330 000, PEA for offsets up to \$110 000), and/or
- vegetation impacts that trigger the Aboriginal Heritage Act 1988.

3.2 Native Vegetation Act 1991 approval requirements

Removal of native vegetation is considered to be seriously at variance with the 'Principles of Clearance', under the NVA, if the vegetation to be removed is of particular importance. The principles cover issues including rare species, significant habitat, a high level of species diversity, significant amenity, etc. A full list of the 'principles of clearance' is included in NVA Schedule 1— Principles of native vegetation clearance.

The *Native Vegetation Regulations 2017* include a risk assessment pathway. For clearances under Division 5 of the Regulations (such as Works on behalf of the Commissioner of Highways; New dwelling or building works, or Infrastructure works), proponents must demonstrate how they have complied with the mitigation hierarchy. The two considerations that will be applied for assessing the risk to biodiversity conservation from a proposed clearance is the size of the clearance (area of clearance or number of trees to be cleared), and the presence of threatened species or communities (representing three of the 'Principles of Clearance'; Principles b, c and d).

Details on how to assess impacts against the Principles of Clearance, including moderating factors, are available in the NVC Guide for applications to clear native vegetation - Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017.

Table 3.2 summarises the approval requirements and escalating factors for native vegetation removal.

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Table 3.2 Criteria and escalating factors for New Works² impacting vegetation subject to the *Native Vegetation Regulations 2017*

Impact Level	Pastoral	Foodston Forton
Agricultural	Escalating Factor	
(AMLR, EP, N&Y, SAMDB and SE NRM Regions) Level 1:	(AW and SAAL NRM Regions)	
 Patches – 500 m² (0.05 ha) or less AND/OR Scattered Trees – 5 trees or less Both the Patches and Scattered Trees can not include any trees with a trunk circumference of 500 mm (50 cm) or more measured at 1 m above the ground. 	 Patches – 3 ha or less AND/OR Scattered Trees – 5 trees or less Both the Area and Scattered Trees can not include any trees with a trunk circumference of 300 mm (30 cm) or more measured at 1 m above the ground. 	 If there is a high likelihood that the site contains or is habitat for species listed under the NPW Act or a threatened community under the EPBC Act AND/OR There is an associated application³ within the last 5 years, the application is raised to a Level 2.
Level 2:		
 Patches – greater than 0.05 ha but less than or equal to 0.5 ha AND/OR Scattered Trees – 20 trees or less In accordance with the NVA Section 25 Guideling 	Patches – greater than 3 ha but less than or equal to 10 ha AND/OR Scattered Trees – 20 trees or less Patches – greater than 3 ha but less than or equal to 10 ha AND/OR Res relating to vegetation management for public	If the clearance is seriously at variance with Principle of Clearance 1(b), 1(c), or 1(d) ⁴ , the application is raised to a Level 3.
safety (referenced in Native Vegetation Regulati All Category 1 removals (applicable in all al AND/OR Category 2 removals of 20 trees or less, an areas) and/or less than or equal to 10 ha (in page 1).		
Level 3:		
 Clearance beyond Level 2 AND Total Biodiversity Score – less than or equal to 250 	 Clearance beyond Level 2 AND Total Biodiversity Score – less than or equal to 2500 	If the clearance is seriously at variance with Principle of Clearance 1(b), 1(c), or 1(d) ⁴ , the application is raised to a Level 4 .
 In accordance with the NVA Section 25 Guidelin safety (referenced in Native Vegetation Regulation Category 2 removals greater 20 trees, and/and/or greater than 10 ha (in pastoral areas). 		
Level 4:		
 Clearance beyond Level 2 AND Total Biodiversity Score – greater than 250 	 Clearance beyond Level 2 AND Total Biodiversity Score – greater than 2500 	NA
Applicable in all areas: Category 3 removals in accordance with the NV management for public safety (referenced in Na		

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 $^{^{2}}$ Refer to Section 4.1 for a definition of 'New Works'.

³ In accordance with the NVC *Guide for applications to clear native vegetation - Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017*, an associated application is when the following applies:

An application to clear native vegetation was approved or has been applied for on the same property title within the last 5 years, regardless of whether the applicant was the owner of the land at the time of the previous application.

Where the applicant is not the owner of the land (e.g. local councils managing the land under their care and control, utility companies building infrastructure) or clearance will occur on land not subject to a property title (e.g. road reserve), an application to clear native vegetation was approved or has been applied for within 5 km of the proposed clearance area and directly related to the current application (i.e. for the same project, development or piece of infrastructure) within the last 5 years.

⁴ **Principle 1(b)** – it has significance as habitat for wildlife; **Principle 1(c)** – it includes plants of a rare, vulnerable or endangered species; **Principle 1(d)** – the vegetation comprises the whole, or a part, of a plant community that is rare, vulnerable or endangered.

3.3 Development Act 1993 approval exemptions for Regulated and Significant trees

Schedule 3(17) of the *Development Regulations 2008* specifically excludes certain tree damaging activities from the definition of 'development' (and therefore from the requirement to gain DAC approval). No approval is needed to impact a Regulated Tree (including a Significant Tree) in certain circumstances listed in Development Regulations 2008 Part 2, 6A (5). Additionally, some tree damaging activities within the Adelaide Park Lands or on any land on which a road is located or is proposed to be built or widened; and that is under the care, control and management of the Commissioner for Highways, do not require approval in accordance with Schedule 14(4) of the *Development Regulations*.

Section 20(5) of the Highways Act states that the Development Act does not apply to land that has been acquired under Section 20 of the Highways Act, except in relation to a State Heritage place or where the land acquired is to be used for the purposes of a lease or licence granted in respect of a road that vests, or land that remains vested in the Commissioner under S21A of the Highways Act. Therefore, there is no requirement to seek approval to damage a Regulated Tree.

Similarly, Part 2, Division 3(9) of the Rail Commissioner Act states that the Development Act does not apply to land that has been acquired by the Rail Commissioner under this Act, except in relation to a State Heritage place.

If the tree may not be cleared without the consent of the NVC under the NVA it does not constitute a Regulated tree (as per Part 2, Clause 6A of the *Development Regulations 2008*). In this circumstance, the NVA effectively overrides the Development Act and approval should be sought in accordance with the NVA process (using this SOP).

One exception to the above exclusion is if the tree is declared to be a significant tree, or a tree within a group of trees declared to be significant trees, by a Local Council Development Plan, then development approval will also be required to remove it even if the activity is permitted/approved under the NVA. This declaration of a significant tree by the relevant Development Plan overrides the definition and exclusions in the Development Regulations. (DPTI staff refer to Knet #4212194 and Knet #9047978 for more detailed advice).

4 Construction and maintenance activities

DPTI carries out a variety of construction, demolition, operation and maintenance activities associated with transport and building (including property) related infrastructure. This section summarises common departmental activities where vegetation clearance may be required as part of undertaking these works and associated approval requirements. All works should be planned to avoid or minimise impacts to native and other significant vegetation whilst still ensuring provision of a safe and effective environment for users of the infrastructure.

4.1 New works

4.1.1 Infrastructure construction and demolition

Vegetation is required to be removed for a variety of construction and demolition activities associated with road, rail, marine, property, buildings and any other departmental related infrastructure. These activities (<u>not associated with maintenance</u>) include:

- construction of road, rail and bridge infrastructure
- construction of buildings or dwellings (including schools, hospitals and prisons)
- installation of signs, fences⁵, railings, safety barriers (including deflection zones), gates or safety cameras

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- installation of traffic control devices and traffic islands
- installation of road and infrastructure lighting and Intelligent Transport Systems infrastructure, including conduit trenching
- installation of rail (including light rail) electrical infrastructure including signals, masts, gantries and substations
- construction of rest areas
- installation of amenities or equipment on or adjacent to a road or railway for the use, enjoyment or protection of the public
- creation of borrow pits, campsites and dams
- creation of maintenance turnaround points (e.g. on outback roads)
- installation of culverts (including extensions)
- shoulder sealing and extensions to shoulders (sealed or unsealed)
- initial establishment of safe sight lines and sight triangles at road intersections and rail crossings (subsequent removal of regrowth in these areas is considered a maintenance activity, not new works) (Refer to Section 4.1.2 below)
- initial removal of non-frangible trees/vegetation in the road reserve that present a hazard to errant vehicles leaving the road (refer to Section 4.1.2 below)
- marine dredging with dredge spoil disposal to previously unimpacted area of seagrass
- landscaping, revegetation or beautification works.

Vegetation impacts should be identified during the planning and design of projects, for example via the environmental impact assessment process. Designs and construction methodologies must seek to avoid and/or minimise impacts to vegetation wherever practicable.

Where vegetation is required to be removed for new works, the approval requirements, as outlined in Tables 3.1 and 3.2, relate to the level of impact, extent of clearance and escalating factors. Further advice and direction can be sought from the Principal Environmental Advisor or the Senior Environmental Advisor.

4.1.2 Clearance for public safety

The department undertakes works for the purpose of maintaining or improving public safety; for example, removing non-frangible hazardous trees that are located close to the edge of the travelled way. The NVA Section 25 Guidelines relating to vegetation management for public safety (in accordance with Native Vegetation Regulation 11 (23) Roadside or rail corridor vegetation management) apply in certain circumstances, summarised below. Refer to Table 3.1 for offset requirements and to the Guidelines for more detail on when and how to apply the criteria.

Category 1: Clearance for the establishment of safe sight lines and sight triangles at road intersections and rail crossings

- Clearance must be consistent with Austroads Guide to Road Design: Part 4: Intersections and Crossings General (2009) or AS 1742:2007 Manual of uniform traffic control devices, Part 7: Railway Crossings, to fall within this Category and to be exempt from the requirement to provide an SEB.
- Maintenance of regrowth within areas where clearance has previously been undertaken does not require approval.

over/through a fence. Where shrubs/ bushes are growing through a fence line, those plants in the road reserve growing within1 m of the fence line may be removed without offset. Local Council consent (as well as standard DPTI internal approvals) is still required.

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Category 2: Clearance of non-frangible trees that present a hazard to errant vehicles leaving the road

Clearance must be within the zones shown below, and only of non-frangible vegetation, to fall within this Category and be exempt from the requirement to provide an SEB:

Sealed Roads

≤80 km/hr up to 2 m from the edge of travelled way >80 km/hr up to 3 m from the edge of travelled way

Unsealed Roads

Up to 2 m either side of the grader line edge, capped at a total width including the travelled way itself of up to 12 m

Category 3: Clearance beyond Category 1 and 2 zones

A rigorous assessment of alternative options to reduce the hazard should be undertaken in accordance with the Mitigation Hierarchy. Tree removal should only occur when all other treatment options have been exhausted or discounted. The PEA or SEA should be consulted to determine whether your project can be assessed in accordance with Native Vegetation Regulation 11 (23).

4.2 Maintenance activities

The department carries out a variety of maintenance activities associated with:

- transport infrastructure including road, rail and marine assets
- transport user safety
- departmental properties and building facilities.

Removal of regrowth and seasonal vegetation growth (e.g. weeds, grasses) or growth of trees and shrubs may be required for maintenance/repair and protection of transport infrastructure and other departmental assets.

4.2.1 Maintenance and/or repair of infrastructure

Removal of regrowth is required to maintain and/or protect a variety of road, rail, marine, bridge and buildings infrastructure, including, but not limited to:

- road shoulders
- established road/rail clearance envelopes, clear zones and sight lines
- culverts, drains (including headwalls and open drains) and verges
- cut rock faces
- bridge abutments
- fences, railings, barriers or gates
- traffic control devices, safety cameras, traffic islands
- infrastructure lighting, Intelligent Transport Systems infrastructure, and departmental signs
- rail (including light rail) electrical infrastructure including signals, masts, gantries and substations
- parking bays or roadside rest areas including amenities or equipment on or adjacent to a road for the use, enjoyment or protection of the public
- stacking sites (for storage of pavement/shoulder material and other construction materials/equipment)
- landscaping, revegetation or beautification works
- borrow pits, campsites, dams and Maintenance Turnaround Points.

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The department will extend the control of vegetation where required to ensure regrowth is controlled in accordance with the maintenance specification, departmental assets are not obscured from approaching vehicles, and to allow for protection of infrastructure (refer to 4.2.2 below).

Vegetation may be cleared to allow for machinery access to the infrastructure/asset for maintenance purposes (for example moving machinery from a road through native vegetation to access an eroding/slumping batter for stabilisation works). This clearance shall be restricted to the minimum area practicable (e.g. minimum clearance for the required maintenance machinery access) or to the area of previous impact. Where this vegetation has not been previously cleared for the construction or maintenance of the infrastructure, it can be considered a maintenance activity (with offset as per the Maintenance section of Table 3.1) as long as the impact is less than or equal to Level 2 criteria. New clearance for maintenance vehicle access beyond Level 2 criteria shall be considered as New Works and approvals and offsets are to be undertaken in accordance with the New Works section of Table 3.1.

Regrowth in proximity to infrastructure is controlled in accordance with the Maintenance Activity Zone documented in the Maintenance specification or as defined in contract specific requirements.

4.2.2 Maintenance for protection of infrastructure (including function)

Protection of infrastructure includes vegetation removal or pruning to maintain the long term functionality of departmental assets, i.e. protecting the current and future function. An arborist (or person with equivalent plant health training) must make the determination as to whether the vegetation has a high likelihood of damaging infrastructure (or its function) in the short to medium term, and should be pruned or removed as a maintenance activity.

Vegetation growing on private property but overhanging into the road/rail reserve can be pruned to the property boundary. All pruning is to be undertaken in accordance with the Australian Standard (AS) 4373 Pruning of Amenity Trees.

Protection of infrastructure also includes reasonable vegetation clearance for protection of property and to prevent or inhibit the outbreak of fire or the spread of fire, in accordance with Native Vegetation Regulation 9 (1) and the department's responsibilities under the *Fire and Emergency Services Act 2005*.

4.2.3 Property maintenance

Vegetation is controlled on land held for road, rail and marine purposes and any other land owned or managed by the department, to:

- prevent or inhibit the outbreak of fire or spread of fire
- maintain buildings and infrastructure (including fences)
- maintain landscaping and beautification works.

No approval is required if controlling regrowth using low impact methods and if minimum clearance is undertaken.

In accordance with the *Native Vegetation Regulations 2017*, native vegetation can be cleared as a maintenance activity within 10 metres of an existing building. The 10 metre allowance applies on land subject to a heritage agreement or a management agreement, but not to vegetation to be cleared in connection with a subdivision, or that is growing or situated on land within the River Murray Floodplain unless the clearance involves the limb of a plant that is overhanging a building, and is confined to removing the limb (or part of the limb to any point up to the trunk of the plant).

4.2.4 Marine maintenance

The department manages a number of public marinas and boating facilities in South Australia. The department is responsible for maintaining a safe, navigable passage for vessels to access those facilities; dredging is sometimes required to maintain that access. Dredging activities includes the disposal of the dredge spoil.

Where maintenance dredging activity occurs in an area already impacted through past departmental dredging activity (e.g. where seagrass meadows have already been impacted/cleared), an offset for native vegetation (e.g. seagrass) removal is not required. An offset will be required when new disposal sites are used and where those sites have known native vegetation (e.g. seagrass meadows), based on Coastal Protection Board mapping (i.e. treated as New Works in Table 3.1).

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4.2.5 Sight distance at junctions and intersections

The department will control seasonal growth and vegetation at locations outlined in Operational Instruction 20.1, where such growth and vegetation is restricting road and rail Approach Sight Distance and Safe Intersection Sight Distance as defined in accordance with the relevant Austroads Guide.

No approval is required for maintenance removal of regrowth in areas where clearance for sightlines and sight triangles has previously been approved.

4.2.6 Low impact method of clearance

A low impact method of vegetation clearance means selective control, minimal ground disturbance, cutting cleanly rather than breaking branches, slashing, trimming, or mowing. Low impact methods reduce soil disturbance and potential weed invasion.

Where clearance for maintenance activities is being undertaken using a 'low impact method', works (including access to the site) should ensure that vegetation disturbance is restricted to the minimum practicable and is in accordance with the Maintenance Specification and Contract Specific Requirements. No vegetation should be removed outside the Maintenance Activity Zone

4.2.7 Emergency works

Emergency works are those required to <u>urgently</u> rectify an immediate hazard to users of the transport infrastructure (e.g. a tree that has been identified as structurally unsound), and where there is insufficient time to seek prior internal approval for removal due to the imminent and unacceptable risk of personal injury or property damage. Vegetation is considered to be an immediate hazard if:

- there is an immediate danger that a tree or limb will fall because of disease, damage or any other cause; and
- there is a real and unacceptable risk of personal injury or damage to property if that occurs; and
- the state of the tree has been assessed by a person with expertise in the area of plant health, or by any other person
 acting in an emergency situation or in any other situation that gives rise to an immediate risk of personal injury or
 damage to property; and
- the clearance is confined to removing the limb or other part of the plant causing the danger and only extends to total removal of the tree if that is necessary to remove the existing immediate danger.

To Note: Aboriginal culturally modified trees still require prior approval from the Minister for Aboriginal Affairs and Reconciliation. Additionally, the department can only prune or remove a tree deemed to be an immediate hazard if it is on or overhanging a road under the care, control and management of the Commissioner of Highways (as per s 26A *Highways Act 1926*), or vegetation that is on or overhanging rail infrastructure (as per the *Rail Commissioner Act 2009*). Trees growing on private property that do not overhang such a road or rail infrastructure, but are deemed to be an immediate hazard, will need to be directed to the Local Council for their action in accordance with the *Local Government Act 1999*.

The SEA must be advised of trees that have been removed.

In an emergency situation, work involving a regulated or significant tree can be undertaken without first having received a development approval. As soon as practicable after the emergency work is undertaken (and **within four weeks**), DAC must be notified and a retrospective Development Application must be submitted in accordance with S54A of the Development Act.

In accordance with the Development Act, any tree damaging activity for emergency works on a Regulated or Significant tree must be undertaken to cause the minimum amount of damage to the tree. Therefore, prior to gaining approval from DAC, a tree is only to be pruned to the extent that reduces the hazard to an acceptable level of risk. A whole regulated or significant tree can be removed in an emergency situation if the level of risk cannot be reduced to an acceptable level by pruning alone.

Where a tree has been assessed as a potential or future hazard, not posing an imminent and unacceptable risk of personal injury or property damage, and is situated outside the maintenance responsibilities of the department as defined

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in the department's Operational Instruction 20.1, the tree assessment information should be directed to the relevant authority (most often the Local Council) for their action.

4.2.8 Declared plants and environmental weeds

Declared plants are weeds that are regulated under the *Natural Resources Management Act 2004* due to their threat to primary industry, the natural environment and public safety. Plants are declared under the provisions of the Act relating to their movement, sale, notification and control. Information about declared plants is available on the Primary Industries and Regions SA (Biosecurity SA division) website.

Environmental weeds are exotic plant species that threaten biodiversity, including native vegetation. The DPTI Environmental Weeds list (knet#1072172) is available online at https://www.dit.sa.gov.au/standards/home Where removal of declared plants and environmental weeds is proposed, consideration should be given to potential community concerns as the plants may be of local community or heritage value (e.g. a memorial avenue), or may provide important habitat for threatened fauna species (e.g. blackberries as habitat for Southern Emu-wrens, or exotic pines as a food source for Yellow-tailed Black-Cockatoos). Consultation may be required or be of benefit with the relevant Natural Resources region (e.g. for movement of declared plant material on roads) and/or the Local Council (e.g. for information on memorial avenues).

4.3 Clearance envelopes

4.3.1 Roads and multiple use paths

Vegetation control undertaken on roads is outlined in the department's Operational Instruction 20.1.

A clearance envelope across the full width of the travelled way is necessary to allow for the safe passage of legal height vehicles. The prescribed dimension requirements for heavy vehicles are set out under the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation* (see the National Heavy Vehicle Regulator website www.nhvr.gov.au for more details). Under general dimension limits, the height limit for heavy vehicles is up to 4.6 m for certain types of vehicles.

A range of clearance envelopes have been defined (see below) and are the maintenance responsibility of the Commissioner of Highways. For the majority of the department's road network the standard clearance envelope is applied, however, there are a number of roads within the network that may be defined as a restricted clearance or a key oversize or general oversize route.

The clearance of vegetation within the clearance envelope may be carried out without the need for external approval with only a few exceptions (see Table 3.1).

Where trees of high environmental, aesthetic or social significance are identified, exceptions may be applied to enable these trees to be retained within a defined clearance envelope.

All pruning of limbs encroaching into the clearance envelope must be undertaken in accordance with AS 4373 "Pruning of Amenity Trees" and the department's Master Specification. Pruning may extend beyond the clearance envelope to the nearest growth point or collar, to protect the tree from infection or disease and minimise the development of weakly attached growth.

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a) Standard clearance - urban and rural highways

The Commissioner of Highways will maintain a vertical clearance (measured perpendicular to the road) of 4.6 m extending, as a minimum, to the edge of travelled way. To ensure this is achieved, the Commissioner may clear vegetation within an envelope 5.0 m high extending to the edge of shoulder or as defined in the maintenance contract – contract specific requirements. For kerbed roads, the envelope will extend 0.5 m beyond the face of kerb (as indicated in Figure 4.1) or as defined in the maintenance contract – contract specific requirements.

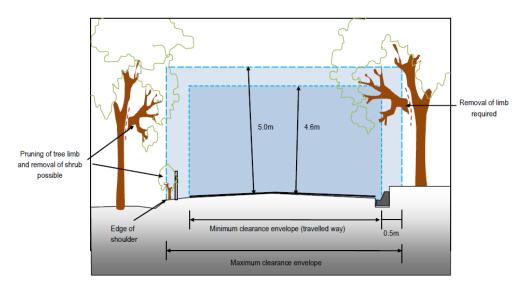


Figure 4.1 Standard vegetation clearance (kerbed and unkerbed)

b) Restricted clearance – mature vegetation

Where existing mature vegetation makes it impracticable to achieve the standard vegetation clearance, as is often the case in the Adelaide hills area, the Commissioner of Highways will maintain a vertical clearance (measured perpendicular to the road) of 4.6 m to the edge of the travelled way. To ensure this is achieved, the Commissioner may clear vegetation (with the exception of whole trees with a butt diameter >150 mm) within an envelope 5.0 m high extending to the kerb or 1.0 m beyond the edge of travelled way in unkerbed areas (as indicated in Figure 4.2). Sections of DPTI maintained roads for which restricted clearance envelopes apply can be found in Minintegration-weight-10811887 and online at https://www.dit.sa.gov.au/standards/home under the Vegetation heading.

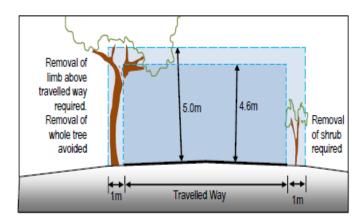


Figure 4.2 Restricted clearance – mature vegetation (kerbed and unkerbed)

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c) Restricted clearance -dedicated parking

Where dedicated parking lanes or areas are adjacent to the travelled way, the Commissioner of Highways will maintain a vertical clearance (measured perpendicular to the road) of 4.6 m to the edge of the travelled way only. To ensure this is achieved, the Commissioner may clear vegetation within an envelope 5.0 m high extending to the edge of travelled way (as shown in Figure 4.3). The trimming of vegetation over the parking lane or area shall be the responsibility of Council unless agreed otherwise in writing with the Commissioner.

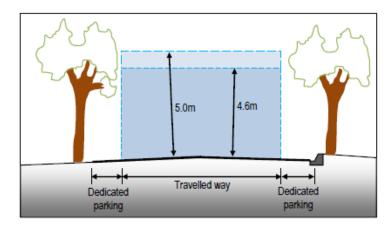


Figure 4.3 Restricted clearance – dedicated parking

d) Medians

Less than or equal to 60 km/h

For medians within a speed zone less than or equal to 60 km/h, the Commissioner of Highways will maintain a vertical clearance (measured perpendicular to the road) of 4.6 m to the edge of travelled way. To ensure this is achieved, the Commissioner may clear vegetation on the median to a height of 5.0 m within 0.5 m of the travelled way, and to a height of 2.5 m within 1.0 m of the edge of the travelled way or to the nearest tree trunk, whichever is the lesser (as indicated in Figure 4.4), and as necessary to allow reasonable access for mowing.

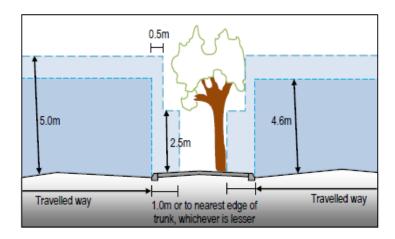


Figure 4.4 Clearance over medians (less than or equal to 60 km/h)

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Greater than 60 km/h

For medians within a speed zone greater than 60 km/h, the Commissioner of Highways will maintain a vertical clearance (measured perpendicular to the road) of 4.6 m to the edge of shoulder or face of kerb, as appropriate. To ensure this is achieved, the Commissioner may clear vegetation on the median to a height of 5.0 m within 0.5 m of the edge of the median shoulder or face of kerb (as indicated in Figure 4.5), or as defined in the contract specific requirements and as necessary to allow reasonable access for mowing.

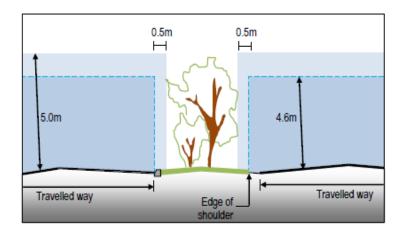


Figure 4.5 Clearance over medians (greater than 60 km/h)

e) Oversize Vehicle Routes

The department has nominated a network of routes suitable for over mass and over dimensional vehicles (i.e. heavy vehicles that exceed the general mass, dimension and loading requirements set out under the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation*. The General Oversize/Overmass Routes and Key Oversize/Overmass Routes are mapped in Knet #9236355 and can be accessed online at http://maps.sa.gov.au/RAVNet/index.html. The clearance envelopes for these routes are defined as follows.

General Oversize/Overmass Vehicle Routes

Where a designated General Oversize/Overmass Route is maintained by the Commissioner of Highways, the Commissioner will provide for a vertical clearance (measured perpendicular to the road) of 6.5 m and a minimum width of 9.0 m. To ensure this is achieved, the Commissioner may clear vegetation within an envelope 7.0 m high and a minimum width of 10.0 m or as defined in the contract specific requirements (as indicated in Figure 4.6).

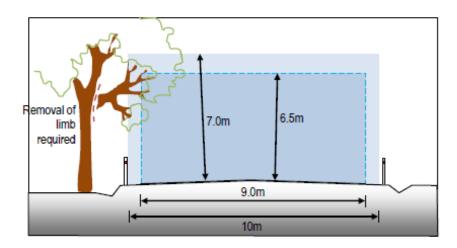


Figure 4.6 Clearance requirements on General Oversize/Overmass Vehicle Routes

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Key Oversize/Overmass Vehicle Routes

Where a designated Key Oversize/Overmass Route is maintained by the Commissioner of Highways, the Commissioner will provide for a vertical clearance (measured perpendicular to the road) of 7.2 m and a minimum width of 9.0 m. To ensure this is achieved, the Commissioner may clear vegetation within an envelope 7.7 m high and a minimum of 10.0 m wide or as defined in the contract specific requirements (as indicated in Figure 4.7).

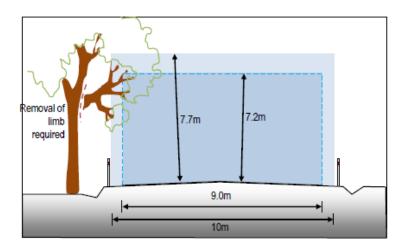


Figure 4.7 Clearance requirements on Key Oversize/Overmass Vehicle Routes

f) Multiple use paths

Where a multiple use path (including veloways, shared use paths, and cycle paths) is maintained by the Commissioner of Highways, the Commissioner will maintain a vertical clearance of 4.6 m to the edge of the seal or edge of path if unsealed, to allow for the passage of legal height vehicles for maintenance purposes. To ensure this is achieved, the Commissioner may clear vegetation within an envelope 5.0 m high extending to a maximum of 1 m beyond the edge of the seal or edge of path, if unsealed.

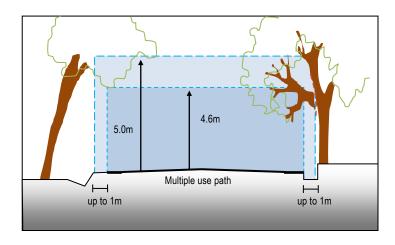


Figure 4.8 Clearance requirements for multiple use paths

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g) Cut rock faces

Tree roots can destabilise cut rock faces, jacking rocks apart and causing rock falls onto roads. Vegetation clearance envelope requirements have been developed for cut rock faces in order to maintain the stability of those cuttings.

Where a designated cut rock face is maintained by the Commissioner of Highways, the Commissioner will assume the maintenance responsibility for a clearance envelope consisting of the rock face itself and an area extending a distance of 5.0 m beyond the crest of the rock face, or to the boundary of the road reserve, whichever is closer (as shown in Figure 4.9). To ensure this is achieved, the Commissioner may clear the following types of vegetation:

- with roots expected to grow to a diameter greater than 10 mm (which could include trees and some understorey shrubs, but is unlikely to include grasses and low growing herbs), and
- with part or all of the stem(s) growing within 5.0 m of the crest, measured at ground level.

There may be some instances where larger trees/shrubs growing beyond the clearance envelope described above have roots that are deemed to be destabilising the rock face (via an arborist assessment and geotechnical engineering advice). In these instances, if there is an unacceptable safety risk to road users, the tree(s) may be removed as a Maintenance activity in accordance with Table 3.1.

A register of designated cut rock faces in the Adelaide Metropolitan area is available in <u>Knet #8630631</u>. For details of designated cut rock faces outside the Adelaide Metropolitan area, contact Asset Management, Technical Services.

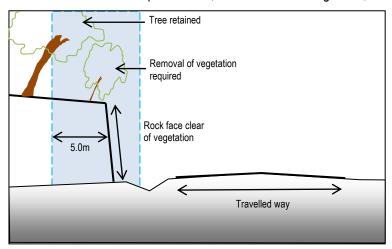


Figure 4.9 Clearance requirements for cut rock faces

h) Roadside infrastructure

Roadside infrastructure includes roadside assets such as culvert headwalls, as well as road furniture, which is a general term covering all signs and devices for the control, guidance and safety of traffic, and the convenience of road users (for example signs, guide posts, safety barriers).

The Commissioner of Highways will remove vegetation regrowth within 0.5 m around roadside infrastructure and as required for maintenance of sight distance and to maintain the function of that roadside infrastructure (as indicated in Figure 4.10). The Commissioner will maintain safety barrier deflection zones clear of non-frangible vegetation in accordance with the manufacturer's/suppliers requirements.

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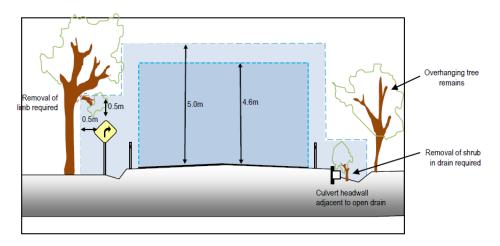


Figure 4.10 Clearance around roadside infrastructure

j) Fast growing species

Coastal wattle is a fast-growing species that is prevalent on some roadsides in the South East of the state. To allow for regrowth and to extend the time between maintenance pruning, *Acacia longifolia* (Coastal Wattle) may be pruned up to an additional 2.0 m beyond the clearance envelope.

Pruning and removing of coastal wattle can be undertaken without and offset to the property boundary in the natural Resourses South East region in accordance with Native Vegitation Regulation 8 (16), as long as it conforms to the requirements of the NVC Native Vegetation Information Sheet 20 (refer to DEWNR website:

http://www.environment.sa.gov.au/managing-natural-resources/native-vegetation/clearing-offsetting/clearance-

4.3.2 Clearance envelopes - rail and tram

undertaken within the rail corridor is undertaken in accordance with Part 2, Division 3, Section 10 (1a) of the *Rail Commissioner Act 2009*. Clearance for electrified rail lines should also be undertaken in accordance with the department's Public Transport Services document "Principles of Vegetation Control on Electrified Rail Lines" (Knet #5714414).

Clearance envelopes as outlined in Sections 4.3.2 a), b) and c) must be kept clear of vegetation that presents an unacceptable risk. Maintenance of the clearance envelope may be carried out without the need for approval, with only a few exceptions (see Table 3.1).

All pruning of limbs encroaching into the clearance envelope must be undertaken in accordance with AS 4373 "Pruning of Amenity Trees" and the Master Specification. Pruning may extend beyond the clearance envelope to the nearest growth point or collar, to protect the tree from infection or disease and minimise the development of weakly attached growth.

a) Standard vegetation clearance envelope – electrified rail

Where rail lines have been electrified, the Rail Commissioner will maintain a 360 degree clearance envelope of 5 m around any live electrical apparatus within the overhead wiring system, as shown in Figure 4.11. This will consist of a 3 m 'exclusion zone' (which is to be kept free of vegetation, people, materials and equipment), and an additional 2 m (to ensure that the 'exclusion zone' can be safely maintained at all times, with a maintenance regime no more frequent than once per year).

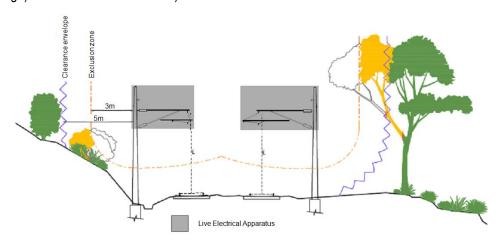
The clearance envelope will be vertically infinite to minimise risk of objects fouling the track or damaging the overhead wiring system. In exceptional circumstances, where approval has been granted by the General Manager, Infrastructure

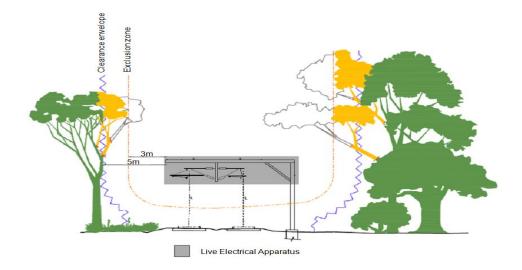
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Delivery or the General Manager, Asset Management, vegetation may be permitted to remain within the clearance envelope.

Live electrical apparatus is defined as any apparatus that is not electrically connected to earth (thereby, a potential difference (voltage) exists between it and earth). Note: the 'earth wire' should also be considered as 'live'.





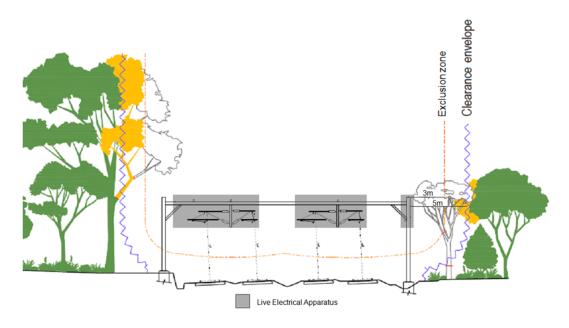


Figure 4.11 Clearance around live electrical apparatus (multiple configurations)

b) Standard vegetation clearance envelope – non electrified rail

Where rail lines are not electrified, the Rail Commissioner will maintain a vertically infinite clearance over the width of the railway track formation (to minimise risk of objects fouling the track) and 5.0 m vertical clearance over the width of any maintenance access track along the rail corridor, as shown in Figure 4.12. Vegetation may be pruned up to 0.5 m beyond the edge of the clearance envelope to reduce the frequency of maintenance pruning.

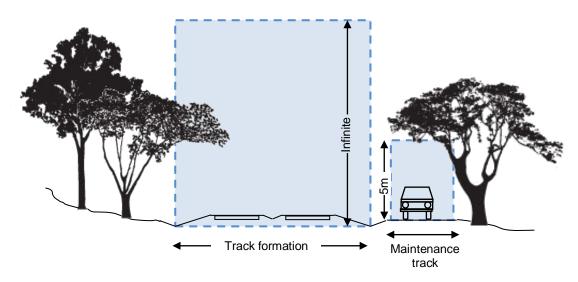


Figure 4.12 Clearance envelope for protection and operation of track

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c) Standard vegetation clearance envelope - tram line

The Rail Commissioner will maintain a vertically infinite clearance over the width of the tram track formation, including 0.5 m beyond the toe of ballast (to minimise risk of objects fouling the track). Additionally, the Rail Commissioner will maintain a vertically infinite clearance of 1.0 m around electrical infrastructure, such as posts and wires, as shown in Figure 4.13. Vegetation may be pruned up to 0.5 m beyond the edge of the clearance envelope to reduce the frequency of maintenance pruning.

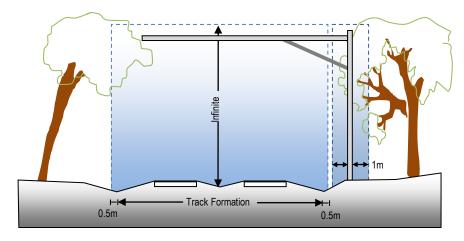


Figure 4.13 Clearance envelope for protection and operation of tram line

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5 Vegetation assessment and removal approval process

The vegetation assessment and removal approval process is summarised in Figure 5.1. It commences with a preliminary assessment and ceases when all required approvals are obtained and records of the process are filed. This process is intended as a guide only; actual requirements may differ between activities depending on the type of removal. The process relates only to vegetation assessment, removal and mitigation, and does not address other environmental impacts. Further information about the process can be obtained from the SEA.

- Project or maintenance activity need identified
- 2. Concept plan prepared (for projects only)
- 3. Initial desktop assessment or site inspection to identify if vegetation may be affected, and what type (e.g. native, regulated, amenity)
- 4. Identify high quality vegetation to be retained wherever practicable
- 5. Scope possible impacts and provide advice to Concept Planner / Project Manager / Maintenance Officer on possible level of approval required and timeframes
- 6. Include constraints identified in the initial assessments and site inspection into planning / design / construction contracts, and proceed with planning / design taking into consideration these constraints
- 7. Vegetation survey undertaken (usually via external Contractor), which identifies the SEB or offset required, and the approval authority
- 8. Vegetation survey contractor to prepare approval documentation
- 9. Approval documentation submitted to SEA and to GMID where required
- 10. Vegetation survey contractor (or major project contractor / contractor, depending on contract requirements) to obtain necessary approvals. SEA to provide advice as required
- 11. Project Manager / Maintenance Officer to ensure approval requirements are implemented by the major project contractor / contractor / maintenance contractor

Figure 5.1 Vegetation assessment and removal approval process steps

Any vegetation removal activities must be undertaken in accordance with Commonwealth and State legislation, and the department's Environmental Management System including:

 all relevant DPTI environmental guidelines, environmental instructions, manuals and procedures available online at https://www.dit.sa.gov.au/standards/home

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6 Remediation measures

Most vegetation removal requires remediation measures such as replacement plantings or a contribution to a specific fund to offset the impacts of the clearance and to ensure that not only is there is no net loss of vegetation, but in the case of native vegetation, that there is an overall environmental gain.

Table 3.1 outlines when remediation or replacement plantings are required to offset the removal of both native and non-native vegetation. Table 3.1 also specifies the remediation rate for the removal of vegetation not covered by the Native Vegetation Act, Development Act or EPBC Act. In most cases a 1:1 or 2:1 offset is required. This requirement is set by DPTI, i.e. it is not required under any legislation. Hence, there is some flexibility in the way the Department chooses to deliver the offset.

For impacts on vegetation deemed to have significant amenity or community value, but where an offset is not required under legislation, a 2:1 offset can be applied at the discretion of the SEA or PEA. For example, a large remnant tree that is growing very close to the road and causing damage to the road infrastructure could be pruned or removed as part of a maintenance activity (protection of infrastructure) and not necessarily require an offset for its removal. In this instance, the tree could be deemed by the SEA or PEA to hold both significant amenity and community value, and would have a 2:1 offset applied.

6.1 Native Vegetation Act remediation requirements

Approvals for vegetation clearances in accordance with the NVA are conditional on the achievement of remediation measures in the form of a Significant Environmental Benefit (SEB). The SEB requirement is based on the premise that natural biodiversity is a non-renewable (finite) resource and that clearance of remnant vegetation contributes to the further loss of habitat, biodiversity and environmental values particularly in highly fragmented landscapes (such as South Australia's agricultural region).

The NVC may give consent to the clearance of native vegetation under the NVA if it is satisfied that actions will be taken that will result in an SEB. The achievement of an SEB is a condition of approval for activities under Schedule 1 Part 6 of the Regulations (e.g. Regulation 12 - Works on behalf of the Commissioner of Highways).

The NVC Policy for a Significant Environmental Benefit - Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017 describes matters that the NVC or its delegates will take into account when considering what constitutes an SEB, and when administering SEB credits and third party SEBs. An SEB must result in an overall environmental gain that considers both the loss of vegetation at the clearance site and the gain in vegetation (either condition, protection and/or extent) to be achieved through actions undertaken elsewhere. Provision of an SEB is not to be used to bypass responsibilities to avoid or minimise damage to biodiversity.

For native vegetation removals, the NVC *Guide for calculating a Significant Environmental Benefit – Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017* sets out the methodologies for calculating the extent of remediation effort required to achieve a SEB, either as an area, or as a payment into the Native Vegetation Fund. The assessment method to use will depend on the type of vegetation proposed to be cleared (i.e. a patch of vegetation versus scattered trees) and the location of the vegetation. The assessment method enables a quantitative calculation of the required SEB. NVC endorsed assessment methodologies include:

- Scattered Tree Assessment Method removal of scattered native trees (refer to the NVC Guide for calculating a Significant Environmental Benefit for a definition of scattered tree)
- Bushland Assessment Method where proposed clearance consists of patches of native vegetation in the agricultural areas of the State (within all NRM regions other than SAAL and AW)
- Rangelands Assessment Method where proposed clearance consists of patches of native vegetation in the pastoral
 areas of the State (within the SAAL and AW NRM Regions, refer to Appendix C for map)

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There are two pathways to achieve an SEB under the NVA; on-ground SEB or SEB payment into the Native Vegetation Fund. If the SEB is required as a result of an approved activity undertaken under the Native Vegetation Regulations, the applicant (i.e. the department) has a choice of either providing an on-ground SEB, or a payment SEB. However, if a proposed clearance will have <u>an offset obligation of greater than 150 SEB Points Required</u> (refer to the NVC *Guide for calculating a Significant Environmental Benefit*), the NVC will first request that a reasonable attempt be made to identify an on-ground SEB before a payment will be accepted.

6.1.1 Departmental SEB delivery strategy

The department is committed to an SEB delivery strategy (endorsed since November 2007) of payment into the Native Vegetation Fund as the primary SEB delivery mechanism.

Provision of on-ground SEB is restricted to situations where:

- vegetation and rehabilitation at the site or within the vicinity of the site is required as a direct result of project requirements (including community and legal requirements). This includes site protection works to stabilise batter slopes and rehabilitate stockpile sites, as well as landscaping to maintain the amenity of the area. However, where the vegetation and rehabilitation activities are occurring within a road reserve, they shall not be used to provide onground SEB in the event that future operational, maintenance or construction activities are required to be undertaken in that area.
- off-site plantings are necessary to gain vegetation removal approvals under the NVA or Environment Protection and Biodiversity Conservation Act 1999.
- delivery of SEB through payment to the Fund has a significantly greater cost than delivery through on-ground works.

The NVC *Policy for a Significant Environmental Benefit* details the requirements for establishing on-ground SEB areas. Where on-ground SEB works are undertaken for DPTI projects, all on-ground SEB offset areas are to be audited (by the department or its contractors) 12 months after the clearance approval decision date and annually during the maintenance period, or as otherwise required in compliance with NVC decision conditions. The performance indicators and targets are to be detailed in a Vegetation Management Plan.

6.1.2 Accredited Third Party Providers

The NVA allows for an SEB to be achieved by someone other than the person who has approval to undertake the clearance, i.e. an Accredited Third Party Provider (in accordance with the *Native Vegetation (Credit for Environmental Benefits) Regulations 2015*). Where on-ground works are required for any of the reasons outlined in the departmental SEB delivery strategy discussed above, the department can consider the use of Accredited Third Party Providers as an alternative to the department carrying out the works itself, provided the SEB can be delivered for an equivalent or lesser cost. If the use of Accredited Third Party Providers is an option (based on the departmental SEB delivery strategy) and if a Provider exists with suitable SEB Area Credit in the required Natural Resources Region, the department must also consider the level of involvement required in negotiating third party offsets and managing contracts with third party providers.

6.1.3 SEB credits

Where the department undertakes voluntary SEB activities or environmental initiatives by either undertaking actions not linked to an existing vegetation clearance approval and / or exceeding the required SEB, those actions may, subject to NVC endorsement, be used as credit towards a reduction in SEB requirements for other projects.

6.1.4 Borrow pits

In some areas, the operation of borrow pits and quarries may have a long life. Wherever practicable, rehabilitation of the borrow pit site should be undertaken progressively as the material is used. Exhausted and obsolete pits should be rehabilitated through: spreading any remaining over-burden; reshaping the pit to reduce erosion potential (flatten pit faces to a slope <6:1); scarify the pit floor to improve permeability, reduce the likelihood of it holding water and encourage

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natural regeneration of the site; and construct diversion drains around the edge of the pit to minimise erosion caused by water flowing into the pit across batter slopes.

Offsets for borrow pits may allow for a reduction on the basis of ecological restoration activities over the clearance site, subsequent to the clearance. However, the reduction is only to be applied if the rehabilitation works commence within 7 years at most of the clearance occurring. Due to the predominantly long life span of a borrow pit, this reduction in SEB offset requirements is unlikely to be applicable in most instances. Refer to the NVC *Guide for calculating a Significant Environmental Benefit – Under the Native Vegetation Act 1991 and Native Vegetation Regulations 2017*.

6.2 Development Act remediation requirements

As shown in Table 3.1, where approval is required under the Development Act to remove a regulated or significant tree, an offset of 2:1 (for regulated trees) or 3:1 (for significant trees) will be required. The DAC may stipulate additional requirements in the conditions of approval, for example, a certain type of replacement such as semi-mature locally indigenous tree species (greater than 1 m in height), the timeframe within which the planting must be completed, and that the trees must be maintained in good condition at all times and replaced if necessary.

If it is not feasible to provide replacement plantings on-ground, a payment in accordance with the gazetted Development Application Fees may be made into the Planning and Development Fund in lieu of the replacement of trees on-ground. From 1 July 2016, the fee is set at \$96 (GST exempt) per tree (i.e. 2:1 or \$192 for removing a regulated tree; 3:1 or \$288 for removing a significant tree). The fee amount is generally revised annually. The intention to make a payment in lieu of replacement trees should be indicated in the development application.

6.3 Environment Protection and Biodiversity Conservation Act remediation requirements

In accordance with the EPBC Act, an environmental offset is a conservation action that is intended to compensate for the residual adverse impacts of an action. Offsets for affecting matters of National Environmental Significance are required under the EPBC Act if the residual impacts are significant. In accordance with the EPBC Act, offsets should be tailored specifically to the attribute of the protected matter that is being impacted. Where possible, this work should be integrated with any SEB offsets under the NVA. Offsets are only considered after all reasonable actions to avoid or mitigate environmental damage as a result of the works have been fully explored.

The Australian Government Department of the Environment and Energy has an Environmental Offsets Policy and an accompanying Offsets Assessment Guide, which uses an impact and offset calculator to assess the suitability of offset proposals. The Offsets Assessment Guide only applies where the impacted protected matter is a threatened species or ecological community.

For the Environmental Offsets Policy and Assessment Guide, refer to: http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy

6.4 Remediation for amenity vegetation, vegetation not covered by the Native Vegetation Act and vegetation cleared in accordance with public safety Native Vegetation Regulation 11(23)

As per Table 3.1, the removal of amenity vegetation, vegetation not covered by the NVA and vegetation cleared for public safety in accordance with Native Vegetation Regulation 11 (23) most often requires replacement at a rate of 1:1 or 1:2, except in specific circumstances. Where feasible, replacement plantings or other remediation works should be located as close as possible to where the clearance is undertaken, in order to compensate for the loss of amenity in the immediate

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locality. Where trees form an important landscape feature or provide a significant amenity benefit (e.g. a planted avenue, or visual screening) the first preference is to replace the trees on-site, or at a location agreed to with the affected parties.

6.4.1 DPTI Amenity Planting Fund

The department has established an Amenity Planting Fund to be used as a first preference for offsetting the removal of amenity vegetation, vegetation not covered by the Native Vegetation Act and vegetation cleared in accordance with public safety Native Vegetation Regulation 11(23). This fund was established to provide a more efficient and strategic approach to offsetting, as often it is not feasible or economic for the department to deliver the required offset on-the-ground (e.g. where small numbers make replanting and maintenance costs prohibitive).

Payments into the department's Amenity Planting Fund are made in lieu of undertaking on-ground replanting and are to be paid at the following rates:

- \$96 (excl GST) per tree removed (i.e. consistent with the gazetted Development Application Fee in lieu of the replacement of a tree under the Development Regulations), and
- \$5000 (excl GST) per hectare of vegetation cleared.

The cumulative funds will be distributed annually at the end of each financial year by Asset Management, Technical Services in agreement with the PEA. The fund monies may be used on specific environmental projects run by the department, or may be provided to a council, Natural Resources Management Board or conservation-focussed organisation to fund environmental programs (e.g. landscaping, revegetation, bush-care or weed control works). When distributing funds, consideration should be made to supporting projects within closest proximity to the location of vegetation clearance impacts throughout the financial year.

An invoice from the recipient body for the total combined payments will be obtained prior to the end of financial year. Each departmental project will then be billed the relevant amount against the invoice. If the Amenity Planting Fund monies are used for projects run by external agencies, the payment shall be inclusive of GST.

Grants shall be managed in accordance with Treasurer's Instruction 15: Grant Funding.

6.4.2 Payments to third parties for amenity offsets

Where requested by a third party as part of a specific project or activity (or where deemed appropriate by the Project Manager or SEA), an agreement can be made with the relevant council, the regional Natural Resources Management Board, or a community group, to fund landscaping, revegetation, bush-care or weed control work in the local area in order to offset amenity vegetation. Funding should be equivalent to the amount that would have been paid into the department's Amenity Planting Fund (see Section 6.4.1). Any monies provided to a third party should be accompanied by a letter outlining what the funds are to be used for, and any additional conditions considered appropriate.

7 Non-conformances

Vegetation removal undertaken without the appropriate approval(s), as outlined in the Vegetation Removal Policy, is to be treated as a 'non-conformance'. 'Retrospective' approvals (both internal and external) must be sought for all 'non-conformance' removals, in accordance with Table 3.1.

Where a non-conformance has occurred, the cause must be investigated and reported as part of seeking retrospective approval. Where necessary and practicable, measures must be implemented to prevent a reoccurrence.

Appropriate remediation works must be undertaken to rehabilitate the site and ensure that there is no net loss of vegetation, and where required to provide an SEB.

The NVC is unable to give retrospective approval in accordance with the NVA. However, a report shall be provided to the NVC, which summarises the incident and the management measures/remediation actions proposed.

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Clearance of vegetation without approval may attract penalties under Part 5(26) of the NVA, or other legislation. A penalty may also be applied in accordance with the department's Master Specification.

8 Reporting

The department will report to the NVC at the end of each financial year on the status of all native vegetation clearance approvals granted under delegation, as well as on the progress of delivering an SEB and the mitigation work undertaken in compliance with the NVA. The reporting shall include the provision of spatial information.

9 References

Attorney-General's Department, South Australian Legislation webpage https://www.legislation.sa.gov.au/index.aspx.

Department of the Environment and Energy, Environment Protection and Biodiversity Conservation Act 1999 webpage http://www.environment.gov.au/epbc.

Department of Environment, Water and Natural Resources, Native Vegetation webpage http://www.environment.sa.gov.au/managing-natural-resources/native-vegetation.

Department of State Development, Aboriginal Heritage webpage https://www.dpc.sa.gov.au/responsibilities/aboriginal-affairs-and-reconciliation/aboriginal-heritage

South Australian Government, Regulated and significant trees webpage http://www.sa.gov.au/topics/planning-and-property-development-applications/regulated-and-significant-trees.

10 Departmental technical standards, guidelines and specifications

Departmental technical standards and quidelines are available online at www.dpti.sa.gov.au/documents.

Departmental environment-related documents are available online at https://www.dit.sa.gov.au/standards/home

Departmental Operational Instructions are available online at www.dpti.sa.gov.au/standards/tass.

Internal departmental staff can access relevant documents via the Environmental Standards and Guidelines Index, Knet #10773151.

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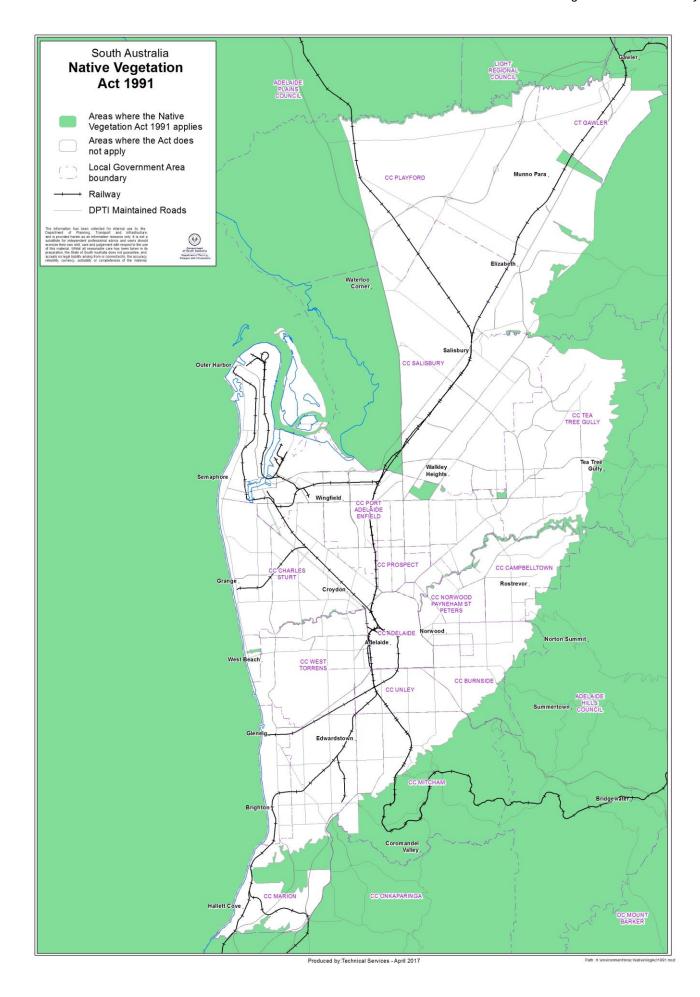
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Appendix A: Native Vegetation Act 1991 boundaries in Adelaide

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2003/05901 DOCUMENT: 1965602



ISSUE DATE:

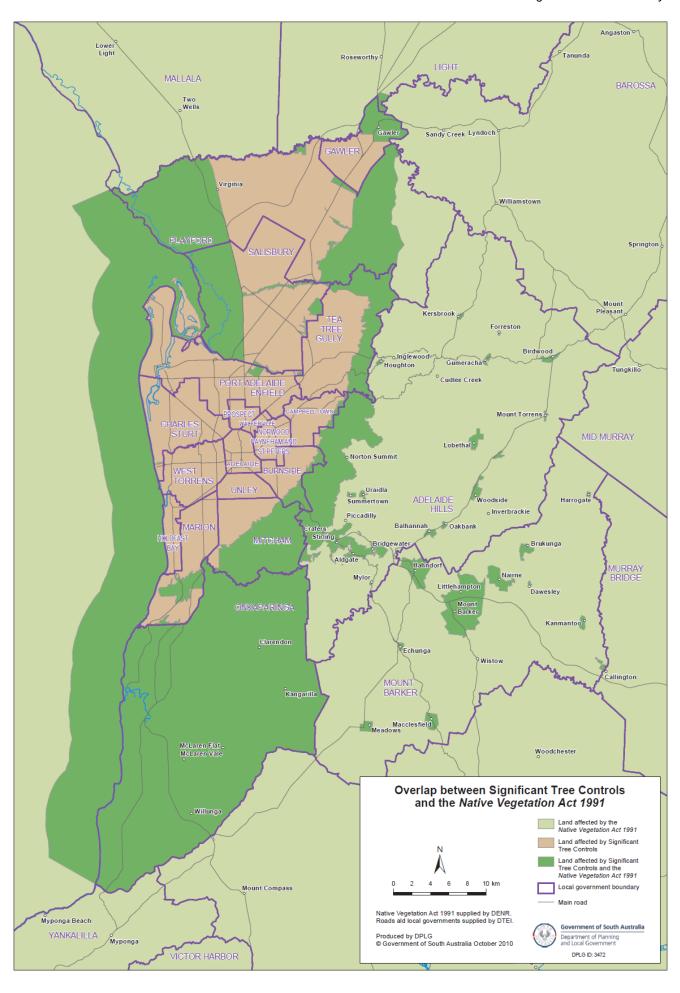
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FILE: DOCUMENT: 1965602

Appendix B: *Development Act 1993* boundaries in Adelaide

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Appendix C: Extent of SA Arid Lands and Alinytjara Wilurara NRM Regions (i.e. Pastoral Areas)

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Produced by: Technical Services, DPTI - March 2017

ISSUE DATE: July 2020 CONTACT OFFICER: Principal Environmental Advisor, Tech. Services