

**Department of Environment  
and Resource Management**

**Regional Vegetation Management Code  
for  
Coastal Bioregions –version 2**

**6 November 2009**

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## 1. Description of region

This Regional Vegetation Management Code (the Code) applies to the Wet Tropics and Central Queensland Coast Bioregions shown in Figure 2. The exact location of the bioregional boundaries are held in digital electronic form by the Department Environment and Resource Management (DERM), and is available from DERM and Water service centres.

## 2. Regulatory background

The Code is used in the assessment of development applications for clearing vegetation under the *Integrated Planning Act 1997* (IPA). The Code is prepared in accordance with provisions set out in the *Vegetation Management Act 1999* (VMA) and is applied where the VMA allows acceptance of an application for assessable clearing. The purpose of the Act is outlined in Appendix One.

The Chief Executive of the Department that administers the VMA is responsible for assessing vegetation clearing applications made under the IPA.

## 3. Purpose of the Code

The Code is prepared pursuant to Division 3 of Part 2 of the VMA in accordance with section 4 of the Act. The performance requirements and, where appropriate, acceptable solutions, advance the purpose of the VMA.

## 4. Amendment of the Code

The Code was amended on 20 November 2006 following stakeholder involvement and public consultation in accordance with the requirements of section 12 of the VMA. The Code was further amended on 6 November 2009. These amendments were deemed minor under section 15 of the VMA and therefore did not require public consultation. The amended Code does not have affect until it is approved under Division 3 of the VMA.

Section 15 of the VMA states that the Minister may amend a Regional Vegetation Management Code without undertaking the required consultation if—

- (a) *the amendment is only to correct a minor error in the code, or make another change that is not a change of substance; or*
- (b) *the code states that an amendment of a stated type may be made to the code by amendment under this section and the amendment is of the stated type; or*
- (c) *the amendment is a permitted amendment of the code.*

For the purposes of section 15(b) of the VMA, amendments of the following type can be made:

- additions and/or omissions to the lists of regional ecosystems in the tables of the Code; or
- modification of the definition of a wetland or significant wetland; or
- modification of the definition of a watercourse or stream order.

For the purposes of section 15(c) of the VMA, permitted amendment of a regional vegetation management code, means an amendment of—

- a provision of the code about a suggested way of achieving a required outcome under the code; or
- a provision of the code to make it consistent with the State policy.

## 5. Scope of applications assessed under the Code

The Code applies to the assessment of properly made applications. Section 22A of the VMA must be satisfied for an application to be a properly made application. Under section 22A of the VMA, a vegetation clearing application is for a relevant purpose if the applicant satisfies the Chief Executive that the development applied for is—

- a project declared to be a significant project under the *State Development and Public Works Organisation Act 1971*, section 26; or
- necessary to control non-native plants or declared pests; or
- to ensure public safety; or
- for establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure (each *relevant infrastructure*), and the clearing for the relevant infrastructure can not reasonably be avoided or minimised; or
- a natural and ordinary consequence of other assessable development for which a development approval as defined under the Planning Act was given, or a development application as defined under the Planning Act was made, before 16 May 2003; or
- for fodder harvesting; or
- for thinning; or
- for clearing of encroachment; or
- for an extractive industry.

## 6. Far North Queensland Regional Plan

This code is consistent with the Far North Queensland Regional Plan, which endorses the protection of biodiversity through measures such as maintaining habitat connectivity, conserving regional ecosystems, and protecting regional biodiversity.

## 7. Application of the Code

### 7.1 Parts of the Code

The Code contains 7 parts. Each part—designated E, F, P, S, T, W, and X—is used to assess applications for the particular relevant purposes shown in Figure 1: Key to parts of the Code.

If an application is for multiple relevant purposes, each part of the application is assessed against the relevant part of the Code. Where the application is for multiple

relevant purposes over the same area, the applicant must meet all performance requirements of the relevant parts of the Code.

Each part contains performance requirements that must be met for an application to receive development approval. Most performance requirements have corresponding acceptable solutions that together manage the environmental effects of clearing to achieve the matters set out in section 3(1) (a) to (e) of the VMA. If clearing is not constrained by any part of an acceptable solution, the application will meet the performance requirement. Applications that are constrained by an acceptable solution (i.e. do not meet an acceptable solution), must demonstrate how the corresponding performance requirement will be achieved through an alternative solution.

Consequently, an application must meet each performance requirement by either demonstrating that the proposed clearing is not constrained by an acceptable solution or satisfying the Chief Executive that the performance requirement is met through another solution.

In determining whether an application meets the acceptable solution, or whether another solution provided by the applicant meets a performance requirement, the precautionary principle will be applied.

## **7.2 Where DERM is the assessment manager for an application and there is a concurrence agency**

Where a concurrence agency for an application directs the Chief Executive to refuse a development approval, the Chief Executive's decision will comply with the direction to refuse the application despite it being consistent with the Performance Requirements contained within this code.

## **7.3 Chief executive may refuse or condition particular applications**

The Chief Executive may refuse an application or impose conditions on an approval if:

- a PMAV applying to the relevant land or part of the land has been made under section 20B and it has not been revoked; or
- if the relevant land is subject to:
  - i) a restoration notice;
  - ii) a compliance notice containing conditions about the restoration of vegetation;
  - iii) a Land Act notice;
  - iv) a trespass notice if the trespass related act under the *Land Act 1994* for the notice is the clearing of vegetation on the relevant land; or
  - v) an enforcement notice under the Planning Act issued for a vegetation clearing office; or
- to the extent that the development applied for is inconsistent with a vegetation management offset or another agreement related to an offset.

## **7.4 Applications on State Land**

The Chief Executive of DERM may refuse any application on State land where there is commercial timber within the application area.

For this purpose:

- State land, is all land excluding:
  - freehold land as defined in the VMA; or
  - indigenous land where the State has not reserved the rights to forest products as listed in Schedule 8, Part 1, Table 4 item 1A of the IPA; and
- commercial timber is defined as species prescribed in Schedule 6 of the *Vegetation Management Regulation 2000*.

### **7.5 Community Designated Infrastructure**

The code may be used to determine the State interest in vegetation management for the designation of land for community infrastructure under Chapter 2, Part 6 of the IPA for an activity under section 112A of the *Electricity Act 1994*.

### **7.6 Definitions**

Words underlined in the text of the Code are defined in the glossary of terms. Where terms used in the Code are not defined in the Code but are defined in the VMA or the IPA, the definition that is in the VMA or the IPA applies to the Code.

<b>Relevant Purpose</b>	<b>Part of Code</b>	<b>Part</b>
For clearing of encroachment	Requirements for clearing encroachment	E
For fodder harvesting	Requirements for fodder harvesting	F
For establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure (each <i>relevant infrastructure</i> ), and the clearing for the relevant infrastructure can not reasonably be avoided or minimised	Requirements for clearing for public safety and infrastructure	P
Clearing that is a natural and ordinary consequence of other assessable development for which a development approval as defined under the IPA was given, or a development application was made, before 16 May 2003	Requirements for clearing for public safety and infrastructure	P
To ensure public safety	Requirements for clearing for public safety and infrastructure	P
A project declared to be a significant project under the <i>State Development and Public Works Organisation Act 1971</i> , section 26	Requirements for clearing for significant projects	S
For thinning	Requirements for thinning	T
Necessary to control non-native plants or declared pests	Requirements for clearing for weed or pest management	W
For an extractive industry	Requirements for clearing for an extractive industry in a <u>Key Resource Area</u> Requirements for clearing for an extractive industry in an area that is not a <u>Key Resource Area</u>	Xa Xb

**Figure 1: Key to parts of the Code**

## **Part E: Requirements for clearing encroachment**

Encroachment means a woody species that has invaded an area of a grassland regional ecosystem to an extent the area is no longer consistent with the description of the regional ecosystem.

<b>Performance requirement</b>
<b>PR E.1: Clearing limited to specific regional ecosystems</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—clearing for the purpose of encroachment does not occur in the Wet Tropics or Central Queensland Coast Bioregions.

## **Part F: Requirements for fodder harvesting**

**Fodder harvesting** is the clearing of vegetation predominantly consisting of fodder species—

- (a) necessary to provide fodder for stock; and
- (b) carried out in a way that—
  - (i) conserves the vegetation in perpetuity; and
  - (ii) conserves the regional ecosystem in which the vegetation is situated; and
  - (iii) results in the woody biomass of the cleared vegetation remaining where it is cleared.

<b>Performance requirement</b>
<b>PR F.1: Limits to fodder harvesting</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—clearing for <u>fodder harvesting</u> does not occur in the Wet Tropics or Central Queensland Coast Bioregions.

## Part P: Requirements for clearing for public safety and infrastructure

Public safety and infrastructure includes clearing that is:

- a) for establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure, if there is no suitable alternative site for the fence, firebreak, road, track or infrastructure; or
- b) a natural and ordinary consequence of other assessable development for which a development approval as defined under the *Integrated Planning Act 1997* (IPA) was given, or a development application as defined under IPA was made, before 16 May 2003; or
- c) to ensure public safety.

<b>Performance requirement</b>
<p><b>PR P.1: Limits to clearing for public safety and infrastructure</b></p> <p>To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—subject to the limitations required to meet PR P.2 to PR P.10—clearing is limited to the extent that is necessary—</p> <ul style="list-style-type: none"> <li>a) for establishing a necessary fence, firebreak, road or vehicular track, or for constructing necessary built infrastructure, if there is no suitable alternative site for the fence, firebreak, road, track or infrastructure; or</li> <li>b) as a natural and ordinary consequence of other assessable development for which a development approval as defined under the IPA was given, or a development application as defined under IPA was made, before 16 May 2003; or</li> <li>c) to ensure public safety.</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><b>PR P.2: Wetlands</b></p> <p>To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—<u>assessable vegetation</u> associated with any natural <u>significant wetland</u> and/or natural <u>wetland</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>b) aquatic habitat; and</li> <li>c) terrestrial habitat.</li> </ul>	<p><b>AS P.2</b></p> <p>P.2.1</p> <p>Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any natural <u>wetland</u>; and</li> <li>b) within 100 metres from any natural <u>wetland</u>; and</li> <li>c) in any natural <u>significant wetland</u>; and</li> <li>d) within 200 metres from any natural <u>significant wetland</u>.</li> </ul> <p>AND</p> <p>P.2.2</p> <p>Where clearing is for a <u>significant community project</u>, maintain the current extent of <u>assessable vegetation</u> associated with any natural <u>significant wetland</u> and/or natural <u>wetland</u> to provide—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
	other pollutants; and b) aquatic habitat; and c) terrestrial habitat.
<p><b>PR P.3: Watercourses</b>                      To regulate the clearing of vegetation in a way that does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—<u>assessable vegetation</u> associated with any <u>watercourse</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting against bank erosion; and</li> <li>b) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>c) aquatic habitat; and</li> <li>d) terrestrial habitat.</li> </ul>	<p><b>AS P.3</b>                      P.3.1                      Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any <u>watercourse</u>; and</li> <li>b) within the relevant distance stipulated in Table 1, of each high bank of each watercourse.</li> </ul> <p>AND                      P.3.2                      Where clearing is for a <u>significant community project</u>, maintain the current extent of <u>assessable vegetation</u> associated with any <u>watercourse</u> to provide—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting against bank erosion; and</li> <li>b) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>c) aquatic habitat; and</li> <li>d) terrestrial habitat.</li> </ul>
<p><b>PR P.4: Connectivity</b>                      To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—areas of <u>mapped remnant vegetation</u> are retained that are—</p> <ul style="list-style-type: none"> <li>a) of sufficient size and configured in a way to maintain ecosystem functioning; and</li> <li>b) of sufficient size and configured in a way to remain in the landscape in spite of any threatening processes; and</li> <li>c) located on the lot(s) that are the subject of the application to maintain</li> </ul>	<p><b>AS P.4</b>                      P.4.1                      Where clearing is less than—</p> <ul style="list-style-type: none"> <li>a) 10 metres wide; or</li> <li>b) 2 hectares;</li> </ul> <p>clearing does not—</p> <ul style="list-style-type: none"> <li>i) reduce the width of <u>mapped remnant vegetation</u> to less than 200 metres; and</li> <li>ii) occur where the width of <u>mapped remnant vegetation</u> is less than 200 metres;</li> </ul> <p>AND                      P.4.2                      Clearing does not—</p> <ul style="list-style-type: none"> <li>a) reduce areas of contiguous <u>mapped remnant vegetation</u> to less than 10 hectares; and</li> <li>b) occur in areas of contiguous <u>mapped remnant vegetation</u> that are less than 10 hectares; and</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p>connectivity to <u>mapped remnant vegetation</u> on adjacent properties.</p>	<p>c) reduce the width of <u>mapped remnant vegetation</u> to less than 200 metres; and  d) occur where the width of <u>mapped remnant vegetation</u> is less than 200 metres; and  e) reduce the total extent of <u>mapped remnant vegetation</u> to less than 30%; and  f) occur where the total extent of <u>mapped remnant vegetation</u> is less than 30%.</p> <p>AND  P.4.3  Where clearing is for a <u>significant community project</u>, <u>maintain the current extent of mapped remnant vegetation</u> where the vegetation is—  a) of sufficient size and configured in a way to maintain ecosystem functioning; and  b) of sufficient size and configured in a way to remain in the landscape in spite of any threatening processes; and  c) located on the lot(s) that are the subject of the application to maintain connectivity to <u>mapped remnant vegetation</u> on adjacent properties.</p>
<p><b>PR P.5: Soil erosion</b>  To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—the effect of clearing does not result in—  a) <u>mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding</u>; and  b) any associated loss of chemical, physical or biological fertility— including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients, within and/or outside the lot(s) that are the subject of the</p>	<p><b>AS P.5</b>  P.5.1  <u>Mechanical clearing</u> only occurs on—  a) <u>stable soils</u> on a <u>slope</u> less than 30%; and  b) <u>unstable soils</u> on a <u>slope</u> less than 10%; and  c) <u>very unstable soils</u> on a <u>slope</u> less than 1%.</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> ( <i>applicants can propose an alternative solution to meet the performance requirement</i> )
application.	
<p><b>PR P.6: Salinity</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing does not contribute to—</p> <ul style="list-style-type: none"> <li>a) waterlogging; or</li> <li>b) the <u>salinisation of groundwater</u>, surface water or soil.</li> </ul>	<p><b>AS P.6</b></p> <p>P.6.1 Where clearing is less than—</p> <ul style="list-style-type: none"> <li>a) 2 hectares; or</li> <li>b) 10 metres wide;</li> </ul> <p>clearing does not occur in any <u>discharge area</u>.</p> <p>AND</p> <p>P.6.2 Where clearing is less than—</p> <ul style="list-style-type: none"> <li>a) 5 hectares; or</li> <li>b) 50 metres wide—</li> </ul> <p>clearing does not occur—</p> <ul style="list-style-type: none"> <li>i) in any <u>discharge area</u>; and</li> <li>ii) within 200 metres of any <u>discharge area</u>. <p>AND</p> <p>P.6.3 Clearing does not occur in areas greater than 5 hectares</p> </li></ul>
<p><b>PR P.7: Conserving remnant vegetation that are <i>endangered</i> regional ecosystems and of concern regional ecosystems</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are <i>endangered</i> regional ecosystems and <i>of concern</i> regional ecosystems—<u>maintain the current extent of <i>endangered</i> regional ecosystems and <i>of concern</i> regional ecosystems.</u></p>	<p><b>AS P.7</b></p> <p>P.7.1 Clearing—</p> <ul style="list-style-type: none"> <li>a) does not occur in an <i>endangered</i> regional ecosystem or an <i>of concern</i> regional ecosystem that is listed in Table 2; and</li> <li>b) in an <i>endangered</i> regional ecosystem or an <i>of concern</i> regional ecosystem that is not listed in Table 2 only occurs where the clearing is less than 10 metres wide or 0.5 hectares.</li> </ul>
<p><b>PR P.8: Essential habitat</b> To regulate the clearing of vegetation in a way that prevents the loss of</p>	<p><b>AS P.8</b></p> <p>P.8.1 Clearing does not occur in an area shown as <u>essential habitat</u> on the <u>essential habitat map</u>.</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
biodiversity— <u>maintain the current extent of essential habitat.</u>	
<p><b>PR P.9: Conservation status thresholds</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems and prevents the loss of biodiversity—<u>maintain the current extent of regional ecosystems listed in Table 3.</u></p>	<p><b>AS P.9</b> P.9.1 Clearing in a regional ecosystem listed in Table 3, does not occur unless the clearing is less than— a) 10 metres wide; or b) 2 hectares.</p>
<p><b>PR P.10: Acid sulfate soils</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either— a) aerate horizons containing iron sulfides; or b) mobilise acid and/or metals.</p>	<p><b>AS P.10</b> P.10.1 Clearing in <u>land zone 1</u>, <u>land zone 2</u> or <u>land zone 3</u> in areas below 5 metre Australian Height Datum— a) is carried out in accordance with an acid sulfate soils environmental management plan as outlined in the <i>State Planning Policy 2/02 Guideline: Planning and Managing Development involving Acid Sulfate Soils</i>; and b) follows management principles in accordance with the Soil Management Guidelines in the <i>Queensland Acid Sulfate Soil Technical Manual</i>.</p>

## Part S: Requirements for clearing for significant projects

Significant projects includes clearing that is for a project declared to be a significant project under the *State Development and Public Works Act 1971*, section 26.

<b>Performance requirement</b>
<p><b>PR S.1: Limits to clearing</b>                  To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—subject to the limitations required to meet PR S.2 to PR S.10—clearing is limited to the extent that is necessary for the project, any associated ancillary works, and the operation of works that comprise a project declared to be a significant project under the <i>State Development and Public Works Organisation Act 1971</i> section 26.</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><b>PR S.2: Wetlands</b>                  To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—<u>maintain the current extent of assessable vegetation</u> associated with any natural <u>significant wetland</u> and/or natural <u>wetland</u> to provide—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>b) aquatic habitat; and</li> <li>c) terrestrial habitat</li> </ul>	<p><b>AS S.2</b>                  S.2.1                  Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any natural <u>wetland</u>; and</li> <li>b) within 100 metres from any natural <u>wetland</u>; and</li> <li>c) in any natural <u>significant wetland</u>; and</li> <li>d) within 200 metres from any natural <u>significant wetland</u>.</li> </ul>
<p><b>PR S.3: Watercourses</b>                  To regulate the clearing of vegetation in a way that does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—<u>maintain the current extent of assessable vegetation</u> associated with any <u>watercourse</u> to provide—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting</li> </ul>	<p><b>AS S.3</b>                  S.3.1                  Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any <u>watercourse</u>; and</li> <li>b) within the relevant distance stipulated in Table 1, of each high bank of each <u>watercourse</u>.</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p>against bank erosion; and</p> <p>b) water quality by filtering sediments, nutrients and other pollutants; and</p> <p>c) aquatic habitat; and</p> <p>d) terrestrial habitat.</p>	
<p><b>PR S.4: Connectivity</b> To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—areas of <u>mapped remnant vegetation</u> are—</p> <p>a) of sufficient size and configured in a way to maintain ecosystem functioning; and</p> <p>b) of sufficient size and configured in a way to remain in the landscape in spite of any threatening processes; and</p> <p>c) located on the lot(s) that are the subject of the application to maintain connectivity to <u>mapped remnant vegetation</u> on adjacent properties.</p>	<p><b>AS S.4</b></p> <p>S.4.1 Where clearing is less than—</p> <p>a) 10 metres wide; or</p> <p>b) 2 hectares;</p> <p>clearing does not—</p> <p>i) reduce the width of <u>mapped remnant vegetation</u> to less than 200 metres; and</p> <p>ii) occur where the width of <u>mapped remnant vegetation</u> is less than 200 metres;</p> <p>AND</p> <p>S.4.2 Clearing does not—</p> <p>a) reduce areas of contiguous <u>mapped remnant vegetation</u> to less than 10 hectares; and</p> <p>b) occur in areas of contiguous <u>mapped remnant vegetation</u> that are less than 10 hectares; and</p> <p>c) reduce the width of <u>mapped remnant vegetation</u> to less than 200 metres; and</p> <p>d) occur where the width of <u>mapped remnant vegetation</u> is less than 200 metres; and</p> <p>e) reduce the total extent of <u>mapped remnant vegetation</u> to less than 30%; and</p> <p>f) occur where the total extent of <u>mapped remnant vegetation</u> is less than 30%.</p> <p>AND</p> <p>S.4.3 Where clearing is for a <u>significant community project</u>, maintain the current extent of <u>mapped remnant vegetation</u> where the vegetation is—</p> <p>a) of sufficient size and configured in a way to maintain ecosystem functioning; and</p> <p>b) of sufficient size and configured in a way to remain in the landscape in spite of any threatening processes; and</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
	<p>c) located on the lot(s) that are the subject of the application to maintain connectivity to <u>mapped remnant vegetation</u> on adjacent properties.</p>
<p><b>PR S.5 Soil erosion</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—the effect of clearing does not result in—</p> <p>a) <u>mass movement</u>, <u>gully erosion</u>, <u>rill erosion</u>, <u>sheet erosion</u>, tunnel erosion, stream bank erosion, <u>wind erosion</u>, or <u>scalding</u>; and</p> <p>b) any associated loss of chemical, physical or biological fertility—including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients, within and/or outside the lot(s) that are the subject of the application.</p>	<p><b>AS S.5</b> S.5.1 <u>Mechanical clearing</u> only occurs on—</p> <p>a) <u>stable soils</u> on a <u>slope</u> less than 30%; and</p> <p>b) <u>unstable soils</u> on a <u>slope</u> less than 10%; and</p> <p>c) <u>very unstable soils</u> on a <u>slope</u> less than 1%.</p>
<p><b>PR S.6: Salinity</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing does not contribute to—</p> <p>a) waterlogging; or</p> <p>b) the <u>salinisation</u> of <u>groundwater</u>, surface water or soil.</p>	<p><b>AS S.6</b> S.6.1 Where clearing is less than—</p> <p>a) 2 hectares; or</p> <p>b) 10 metres wide;</p> <p>clearing does not occur in any discharge area.</p> <p>AND</p> <p>S.6.2 Where clearing is less than—</p> <p>a) 5 hectares; or</p> <p>b) 50 metres wide—</p> <p>clearing does not occur—</p> <p>i) in any <u>discharge area</u>; and</p> <p>ii) within 200 metres of any <u>discharge area</u>.</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> ( <i>applicants can propose an alternative solution to meet the performance requirement</i> )
	<p>AND</p> <p>S.6.3</p> <p>Clearing does not occur in areas greater than 5 hectares</p>
<p><b>PR S.7 Conserving remnant vegetation that are <i>endangered</i> regional ecosystems and of concern regional ecosystems</b></p> <p>To regulate the clearing of vegetation in a way that conserves remnant vegetation that are <i>endangered</i> regional ecosystems and of concern regional ecosystems—<u>maintain the current extent</u> of <i>endangered</i> regional ecosystems and of concern regional ecosystems.</p>	<p><b>AS S.7</b></p> <p>S.7.1</p> <p>Clearing—</p> <p>c) does not occur in an <i>endangered</i> regional ecosystem or an <i>of concern</i> regional ecosystem that is listed in Table 2; and</p> <p>d) in an <i>endangered</i> regional ecosystem or an <i>of concern</i> regional ecosystem that is not listed in Table 2 only occurs where the clearing is less than 10 metres wide or 0.5 hectares.</p>
<p><b>PR S.8: Essential habitat</b></p> <p>To regulate the clearing of vegetation in a way that prevents the loss of biodiversity—<u>maintain the current extent</u> of <u>essential habitat</u>.</p>	<p><b>AS S.8</b></p> <p>S.8.1</p> <p>Clearing does not occur in an area shown as <u>essential habitat</u> on the <u>essential habitat map</u>.</p>
<p><b>PR S.9: Conservation status thresholds</b></p> <p>To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and conserves remnant vegetation that are regional ecosystems—<u>maintain the current extent</u> of regional ecosystems listed in Table 3.</p>	<p><b>AS S.9</b></p> <p>S.9.1</p> <p>Clearing in a regional ecosystem listed in Table 3, does not occur unless the clearing is less than—</p> <p>a) 10 metres wide; or</p> <p>b) 2 hectares.</p>

<p><b>PR S.10: Acid sulfate soils</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either—</p> <ul style="list-style-type: none"><li>a) aerate horizons containing iron sulfides; or</li><li>b) mobilise acid and/or metals.</li></ul>	<p><b>AS S.10</b> S.10.1 Clearing in <u>land zone 1</u>, <u>land zone 2</u> or <u>land zone 3</u> in areas below 5 metre Australian Height Datum—</p> <ul style="list-style-type: none"><li>a) is carried out in accordance with an acid sulfate soils environmental management plan as outlined in the <i>State Planning Policy 2/02 Guideline: Planning and Managing Development involving Acid Sulfate Soils</i>; and</li><li>b) follows management principles in accordance with the Soil Management Guidelines in the <i>Queensland Acid Sulfate Soil Technical Manual</i>.</li></ul>
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## Part T: Requirements for thinning

Thinning means the selective clearing of vegetation at a locality to restore a regional ecosystem to the floristic composition and range of densities typical of the regional ecosystem surrounding that locality. The term does not include using a chain or cable linked between 2 tractors, bulldozers or other traction engines.

<p><b>Performance requirement</b></p>
<p><b>PR T.1: Clearing limited to specific regional ecosystems</b>                  To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—clearing for the purpose of thinning does not occur in the regional ecosystems listed in Table 4, except where clearing is solely for removing native plants not indigenous to the bioregion.</p>

Performance requirement	Acceptable solution <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><b>PR T.2: Vegetation Density</b>                  To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—clearing only occurs where there is an increase of greater than 30% in the cover or density of vegetation within the <u>application area</u> when compared with the cover or density of vegetation typical of the same regional ecosystem surrounding that locality.</p>	<p><b>AS T.2</b>                  AS T.2.1                  Clearing only occurs in areas where—</p> <ul style="list-style-type: none"> <li>a) there is an increase of greater than 30% in the <u>woody species crown cover</u> determined by comparison of the <u>most recent suitable imagery</u> of the <u>application area</u> with <u>past suitable imagery</u> of the <u>application area</u>; or</li> <li>b) the <u>woody species crown cover</u> is greater than 70% on <u>past suitable imagery</u>, and the stem density of <u>immature trees</u> is greater than 1000 stems per hectare; or</li> <li>c) the total <u>application area</u> is less than 15 hectares and there is a stem density of <u>immature trees</u> and woody plants greater than 250 stems in each 50 metre x 50 metre (0.25 hectare) area.</li> </ul> <p>OR</p> <p>AS T.2.2                  Clearing is of native plants not indigenous to the bioregion.</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><b>PR T.3: Wetlands</b> To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—<u>assessable vegetation</u> associated with any natural <u>significant wetland</u> and/or natural <u>wetland</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>b) aquatic habitat; and</li> <li>c) terrestrial habitat.</li> </ul>	<p><b>AS T.3</b> T.3.1 Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any natural <u>wetland</u>; and</li> <li>b) within 100 metres of any natural <u>wetland</u>; and</li> <li>c) in any natural <u>significant wetland</u>; and</li> <li>d) within 200 metres of any natural <u>significant wetland</u>.</li> </ul> <p>OR</p> <p>AS T.3.2 Clearing is limited to native plants that are not indigenous to the bioregion.</p>
<p><b>PR T.4: Watercourses</b> To regulate the clearing of vegetation in a way that does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—<u>assessable vegetation</u> associated with any <u>watercourse</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting against bank erosion; and</li> <li>b) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>c) aquatic habitat; and</li> <li>d) terrestrial habitat.</li> </ul>	<p><b>AS T.4</b> T.4.1 <u>Mechanical clearing</u> does not occur in the regional ecosystems listed in Table 5.</p> <p>OR</p> <p>AS T.4.2 Clearing is limited to native plants that are not indigenous to the bioregion.</p>
<p><b>PR T.5: Soil erosion</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—the effect of clearing does not result in—</p> <ul style="list-style-type: none"> <li>a) <u>mass movement</u>, <u>gully erosion</u>, <u>rill erosion</u>, <u>sheet erosion</u>, tunnel erosion, stream bank erosion, <u>wind</u></li> </ul>	<p><b>AS T.5</b> T.5.1 <u>Mechanical clearing</u> only occurs on—</p> <ul style="list-style-type: none"> <li>a) <u>stable soils</u> on a <u>slope</u> less than 32%; and</li> <li>b) <u>unstable soils</u> on a <u>slope</u> less than 10%; and</li> <li>c) <u>very unstable soils</u> on a <u>slope</u> less than 1%.</li> </ul> <p>OR</p> <p>AS T.5.2 Clearing is limited to native plants that are not</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><u>erosion</u>, or <u>scalding</u>; and</p> <p>b) any associated loss of chemical, physical or biological fertility— including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients, within and/or outside the lot(s) that are the subject of the application.</p>	<p>indigenous to the bioregion.</p>
<p><b>PR T.6: Conserving remnant vegetation that are regional ecosystems</b></p> <p>To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—clearing activities—</p> <p>a) maintain the natural floristic composition and <u>range of sizes</u> of each species of the regional ecosystem evenly spaced across the <u>application area</u>; and</p> <p>b) do not remove <u>mature trees</u>.</p>	<p><b>AS T.6</b></p> <p>T.6.1</p> <p>Clearing—</p> <p>a) does not remove <u>mature trees</u>; and</p> <p>b) does not remove <u>immature trees</u> below the relevant density in Table 6; and</p> <p>c) occurs in a configuration that evenly retains in each 50 metre x 50 metre area the <u>range of sizes</u> of each of the species, except for native plants not indigenous to the bioregion.</p> <p>OR</p> <p>AS T.6.2</p> <p>Clearing is limited to native plants that are not indigenous to the bioregion.</p>
<p><b>PR T.7: Acid sulfate soils</b></p> <p>To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either—</p> <p>a) aerate horizons containing iron sulfides; or</p> <p>b) mobilise acid and/or metals.</p>	<p><b>AS T.7</b></p> <p>T.7.1</p> <p>Clearing in <u>land zone 1</u>, <u>land zone 2</u> or <u>land zone 3</u> in areas below 5 metre Australian Height Datum—</p> <p>a) is carried out in accordance with an acid sulfate soils environmental management plan as outlined in the <i>State Planning Policy 2/02 Guideline: Planning and Managing Development Involving Acid Sulfate Soils</i>; and</p> <p>b) follows management principles in accordance with the Soil Management Guidelines in the <i>Queensland Acid Sulfate Soil Technical Manual</i>.</p> <p>OR</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
	AS T.7.2 Clearing is limited to native plants that are not indigenous to the bioregion.

## Part W: Requirements for clearing vegetation for weed or pest management

Weed or pest management means clearing to control non-native plants or pests declared under the *Land Protection (Pest and Stock Route Management) Act 2002*.

<b>Performance requirement</b>
<p><b>PR W.1 Limits to clearing for weed or pest management</b>                  To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—subject to the limitations required to meet PR W.2 to PR W.7—clearing is limited to the extent necessary to—</p> <ul style="list-style-type: none"> <li>a) control non-native plants or declared pests; or</li> <li>b) provide access for control of non-native plants or declared pests if no alternative route exists.</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><b>PR W.2: Wetlands</b>                  To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—<u>assessable vegetation</u> associated with any natural <u>significant wetland</u> and/or natural <u>wetland</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>b) aquatic habitat; and</li> <li>c) terrestrial habitat.</li> </ul>	<p><b>AS W.2</b>                  W.2.1                  Clearing and associated soil disturbance within—</p> <ul style="list-style-type: none"> <li>a) any natural <u>wetland</u>; and</li> <li>b) 100 metres from any natural <u>wetland</u>; and</li> <li>c) any natural <u>significant wetland</u>; and</li> <li>d) 200 metres from any natural <u>significant wetland</u>, occurs only—                         <ul style="list-style-type: none"> <li>i) within a 1.5 metre radius from the base of the stem of individual non-native or declared plants or within a 3 metre radius around each hole of a rabbit warren; and</li> <li>ii) to the extent necessary to provide access for the control of the non-native or declared plant or to the rabbit warren if no alternative route exists, unless the clearing is to control or provide access to an animal or plant declared as a class 1 or 2 pest under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> for which there is a <u>pest eradication plan</u> in place and is carried out in accordance with that plan.</li> </ul> </li> </ul>
<p><b>PR W.3: Watercourses</b>                  To regulate the clearing of vegetation in a way that does not cause land degradation, prevents the loss of biodiversity</p>	<p><b>AS W.3</b>                  W.3.1                  Clearing and associated soil disturbance within—</p> <ul style="list-style-type: none"> <li>a) any <u>watercourse</u>; and</li> <li>b) the relevant distance stipulated in Table 1, of each</li> </ul>

<p><b>Performance requirement</b></p>	<p><b>Acceptable solution</b> (applicants can propose an alternative solution to meet the performance requirement)</p>
<p>and maintains ecological processes—<u>assessable vegetation</u> associated with any <u>watercourse</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting against bank erosion; and</li> <li>b) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>c) aquatic habitat; and</li> <li>d) terrestrial habitat.</li> </ul>	<p>high bank of each <u>watercourse</u>, occurs only—</p> <ul style="list-style-type: none"> <li>i) within a 1.5 metre radius from the base of the stem of individual non-native or declared plants or within a 3 metre radius around each hole of a rabbit warren; and</li> <li>ii) to the extent necessary to provide access for the control of the non-native or declared plant or to the rabbit warren if no alternative route exists, unless the clearing is to control or provide access to an animal or plant declared as a class 1 or 2 pest under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> for which there is a <u>pest eradication plan</u> in place and is carried out in accordance with that plan.</li> </ul>
<p><b>PR W.4: Soil erosion</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—the effect of clearing does not result in—</p> <ul style="list-style-type: none"> <li>a) <u>mass movement</u>, <u>gully erosion</u>, <u>rill erosion</u>, <u>sheet erosion</u>, tunnel erosion, stream bank erosion, <u>wind erosion</u>, or <u>scalding</u>; and</li> <li>b) any associated loss of chemical, physical or biological fertility—including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients, within and/or outside the lot(s) that are the subject of the application.</li> </ul>	<p><b>AS W.4</b> W.4.1 Clearing and associated soil disturbance on—</p> <ul style="list-style-type: none"> <li>a) <u>stable soils</u> on a <u>slope</u> greater than 32%; and</li> <li>b) <u>unstable soils</u> on a <u>slope</u> greater than 10%; and</li> <li>c) <u>very unstable soils</u> on a <u>slope</u> greater than 1%, occurs only—</li> <li>i) within a 1.5 metre radius from the base of the stem of individual non-native or declared plants or within a 3 metre radius around each hole of a rabbit warren; and</li> <li>ii) to the extent necessary to provide access for the control of the non-native or declared plant or to the rabbit warren if no alternative route exists, unless the clearing is to control or provide access to an animal or plant declared as a class 1 or 2 pest under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> for which there is a <u>pest eradication plan</u> in place and is carried out in accordance with that plan.</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> ( <i>applicants can propose an alternative solution to meet the performance requirement</i> )
<p><b>PR W.5: Conserving remnant vegetation that are regional ecosystems</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—clearing activities—</p> <p>a) maintain the natural floristic composition and <u>range of sizes</u> of each species of the regional ecosystem evenly spaced across the <u>application area</u>; and</p> <p>b) do not remove <u>mature trees</u>.</p>	<p><b>AS W.5</b></p> <p>W.5.1 Clearing to control and/or provide access to an animal or plant declared as a class 1 or 2 pest under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> occurs only—</p> <p>a) in accordance with a <u>pest eradication plan</u>; and</p> <p>b) to the extent necessary to provide access for the control of the class 1 or 2 pest if no alternative route exists.</p> <p>OR</p> <p>W.5.2 Where clearing is to control and/or provide access to a non-native or declared plant, clearing—</p> <p>a) to control the declared or non-native plant—</p> <p>i) must be in accordance with the limitations set out in Table 7; and</p> <p>ii) does not occur by the <u>aerial application</u> of <u>root absorbed herbicides</u>;</p> <p>and</p> <p>b) occurs only to the extent necessary to provide access for the control of the declared or non-native plant if no alternative route exists.</p> <p>OR</p> <p>W.5.3 Clearing to control a declared pest animal under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> occurs only—</p> <p>a) within a 3 metre radius around each hole of a rabbit warren; and</p> <p>b) to the extent necessary to provide access to a rabbit warren if no alternative route exists.</p>
<p><b>PR W.6: Requirements for dense regional ecosystems</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, prevents the loss of biodiversity</p>	<p><b>AS W.6</b></p> <p>W.6.1 Clearing and associated soil disturbance in regional ecosystems listed in Table 8 occurs only—</p> <p>a) within a 1.5 metre radius from the base of the stem of individual non-native or declared plants or within a 3 metre radius around each hole of a</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p>and maintains ecological processes—removal of canopy vegetation does not occur in regional ecosystems listed in Table 8.</p>	<p>rabbit warren; and</p> <p>b) to the extent necessary to provide access for the control of the non-native or declared plant or to the rabbit warren if no alternative route exists, unless the clearing is to control or provide access to an animal or plant declared as a class 1 or 2 pest under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> for which there is a <u>pest eradication plan</u> in place and is carried out in accordance with that plan.</p>
<p><b>PR W.7: Acid sulfate soils</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either—</p> <p>a) aerate horizons containing iron sulfides; or</p> <p>b) mobilise acid and/or metals.</p>	<p><b>AS W.7</b> W.7.1 Clearing in <u>land zone 1</u>, <u>land zone 2</u> or <u>land zone 3</u> in areas below 5 metre Australian Height Datum—</p> <p>a) is carried out in accordance with an acid sulfate soils environmental management plan as outlined in the <i>State Planning Policy 2/02 Guideline: Planning and Managing Development involving Acid Sulfate Soils</i>; and</p> <p>b) follows management principles in accordance with the <i>Soil Management Guidelines</i> in the <i>Queensland Acid Sulfate Soil Technical Manual</i>, unless the clearing is to control or provide access to an animal or plant declared as a class 1 or 2 pest under the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> for which there is a <u>pest eradication plan</u> in place and is carried out in accordance with that plan.</p>

**Part Xa: Requirements for Clearing for an extractive industry in a Key Resource Area**

Part Xa only applies for an extractive industry in a Key Resource Area.

Extractive industry means one or more of the following:

- a) dredging material from the bed of any waters; and
- b) extracting, from a pit or quarry, rock, sand, clay, gravel, loam or other material; and
- c) screening, washing, grinding, milling, sizing or separating material extracted from a pit or quarry, and
- d) includes carrying out work that is the natural and ordinary consequence of carrying out work mentioned in subparagraphs (a), (b) and (c).

<b>Performance requirement</b>
<p><b>PR Xa.1: Limits to clearing for an extractive industry</b></p> <p>To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, prevents the loss of biodiversity, maintains ecological processes and does not cause land degradation—subject to the limitations required to meet PR Xa.2 to PR Xa.10—clearing is limited to the extent that is necessary for—</p> <ul style="list-style-type: none"> <li>a) dredging material from the bed of any waters; and</li> <li>b) extracting, from a pit or quarry, rock, sand, clay, gravel, loam or other material; and</li> <li>c) screening, washing, grinding, milling, sizing or separating material extracted from a pit or quarry; and</li> <li>d) carrying out work that is the natural and ordinary consequence of carrying out work mentioned in subparagraphs (a), (b) and (c).</li> </ul>
<p><b>PR Xa.2: Clearing is staged</b></p> <p>To regulate the clearing of vegetation in a way that prevents the loss of biodiversity, conserves remnant vegetation that are regional ecosystems, maintains ecological processes and does not cause land degradation—clearing—</p> <ul style="list-style-type: none"> <li>a) is staged in line with operational needs that restricts clearing to the current operational area; and</li> <li>b) is limited to the area from which material will be extracted within the term of the development approval; and</li> <li>c) cannot occur until all required permits are obtained.</li> </ul>
<p><b>PR Xa.3: Wetlands</b></p> <p>To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—<u>maintain the current extent of assessable vegetation</u> associated with any natural <u>significant wetland</u> and/or natural <u>wetland</u> to provide—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>b) aquatic habitat; and</li> <li>c) terrestrial habitat.</li> </ul>

<p><b>Performance requirement</b></p>
<p><b>PR Xa.4: Watercourses</b>            To regulate the clearing of vegetation in a way that does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—<u>maintain the current extent of assessable vegetation</u> associated with any <u>watercourse</u> to provide—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting against bank erosion; and</li> <li>b) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>c) aquatic habitat; and</li> <li>d) terrestrial habitat.</li> </ul>
<p><b>PR Xa.5: Connectivity</b>            To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—areas of <u>mapped remnant vegetation</u> —</p> <ul style="list-style-type: none"> <li>a) of sufficient size and configured in a way to maintain ecosystem functioning; and</li> <li>b) of sufficient size and configured in a way to remain in the landscape in spite of any threatening processes; and</li> <li>c) located on the lot(s) that are the subject of the application to maintain connectivity to <u>mapped remnant vegetation</u> on adjacent properties.</li> </ul>
<p><b>PR Xa.6: Salinity</b>            To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing does not contribute to—</p> <ul style="list-style-type: none"> <li>a) waterlogging; or</li> <li>b) <u>salinisation of groundwater, surface water, or soil.</u></li> </ul>
<p><b>PR Xa.7 Conserving remnant vegetation that are <i>endangered</i> regional ecosystems and of <i>concern</i> regional ecosystems</b>            To regulate the clearing of vegetation in a way that conserves remnant vegetation that are <i>endangered</i> regional ecosystems and <i>of concern</i> regional ecosystems—<u>maintain the current extent</u> of <i>endangered</i> regional ecosystems and <i>of concern</i> regional ecosystems.</p>
<p><b>PR Xa.8: Essential habitat</b>            To regulate the clearing of vegetation in a way that prevents the loss of biodiversity—<u>maintain the current extent of essential habitat.</u></p>
<p><b>PR Xa.9: Conservation status thresholds</b>            To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and conserves remnant vegetation that are regional ecosystems—<u>maintain the current extent</u> of regional ecosystems listed in Table 3.</p>
<p><b>PR Xa.10: Acid sulfate soils</b>            To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either—</p> <ul style="list-style-type: none"> <li>a) aerate horizons containing iron sulfides; or</li> <li>b) mobilise acid and/or metals.</li> </ul>

**Part Xb: Requirements for clearing for an extractive industry in an area that is not a Key Resource Area**

Extractive industry means one or more of the following:

- a) dredging material from the bed of any waters; and
- b) extracting, from a pit or quarry, rock, sand, clay, gravel, loam or other material; and
- c) screening, washing, grinding, milling, sizing or separating material extracted from a pit or quarry; and
- d) includes carrying out work that is the natural and ordinary consequence of carrying out work mentioned in subparagraphs (a), (b) and (c).

<b>Performance requirement</b>
<p><b>PR Xb.1: Limits to clearing for an extractive industry</b>                  To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—subject to the limitations required to meet PR Xb.2 to PR Xb.10—clearing is limited to the extent that is necessary for one or more of the following—</p> <ul style="list-style-type: none"> <li>a) dredging material from the bed of any waters; and</li> <li>b) extracting, from a pit or quarry, rock, sand, clay, gravel, loam or other material; and</li> <li>c) screening, washing, grinding, milling, sizing or separating material extracted from a pit or quarry; and</li> <li>d) carrying out work that is the natural and ordinary consequence of carrying out work mentioned in subparagraphs (a), (b) and (c).</li> </ul>
<p><b>PR Xb.2: Clearing is staged</b>                  To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems, does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—clearing—</p> <ul style="list-style-type: none"> <li>a) is staged in line with operational needs that restricts clearing to the current operational area; and</li> <li>b) is limited to the area from which material will be extracted within the term of the permit; and</li> <li>c) cannot occur until all required permits are obtained.</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><b>PR Xb.3: Wetlands</b>                  To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—<u>assessable</u></p>	<p><b>AS Xb.3</b>  <b>Xb.3.1</b>                  Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any natural <u>wetland</u>; and</li> <li>b) within 100 metres from any natural <u>wetland</u>; and</li> <li>c) in any natural <u>significant wetland</u>; and</li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<p><u>vegetation</u> a natural <u>significant wetland</u> and/or natural <u>wetland</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>b) aquatic habitat; and</li> <li>c) terrestrial habitat.</li> </ul>	<ul style="list-style-type: none"> <li>d) within 200 metres from any natural <u>significant wetland</u>.</li> </ul>
<p><b>PR Xb.4: Watercourses</b> To regulate the clearing of vegetation in a way that does not cause land degradation, prevents the loss of biodiversity and maintains ecological processes—<u>assessable vegetation</u> associated with any <u>watercourse</u> is protected to maintain—</p> <ul style="list-style-type: none"> <li>a) bank stability by protecting against bank erosion; and</li> <li>b) water quality by filtering sediments, nutrients and other pollutants; and</li> <li>c) aquatic habitat; and</li> <li>d) terrestrial habitat.</li> </ul>	<p><b>AS Xb.4</b> Xb.4.1 Clearing does not occur—</p> <ul style="list-style-type: none"> <li>a) in any <u>watercourse</u>; and</li> <li>b) within the relevant distance stipulated in Table 1, of each high bank of each <u>watercourse</u>.</li> </ul>
<p><b>PR Xb.5: Connectivity</b> To regulate the clearing of vegetation in a way that prevents the loss of biodiversity and maintains ecological processes—areas of <u>mapped remnant vegetation</u> are retained that are—</p> <ul style="list-style-type: none"> <li>a) of sufficient size and configured in a way to maintain ecosystem functioning; and</li> <li>b) of sufficient size and configured in a way to remain in the landscape in spite of any threatening processes; and</li> <li>c) located on the lot(s) that are</li> </ul>	<p><b>AS X.b5</b> Xb.5.1 Where clearing is less than—</p> <ul style="list-style-type: none"> <li>a) 10 metres wide; or</li> <li>b) 2 hectares;</li> </ul> <p>clearing does not—</p> <ul style="list-style-type: none"> <li>i) reduce the width of <u>mapped remnant vegetation</u> to less than 200 metres; and</li> <li>ii) occur where the width of <u>mapped remnant vegetation</u> is less than 200 metres;</li> </ul> <p>OR</p> <p>Xb.5.2 Clearing does not—</p> <ul style="list-style-type: none"> <li>a) reduce areas of contiguous <u>mapped remnant vegetation</u> to less than 10 hectares; and</li> <li>b) occur in areas of contiguous <u>mapped remnant</u></li> </ul>

<b>Performance requirement</b>	<b>Acceptable solution</b> ( <i>applicants can propose an alternative solution to meet the performance requirement</i> )
<p>the subject of the application to maintain connectivity to <u>mapped remnant vegetation</u> on adjacent properties.</p>	<p><u>vegetation</u> that are less than 10 hectares; and</p> <p>c) reduce the width of <u>mapped remnant vegetation</u> to less than 200 metres; and</p> <p>d) occur where the width of <u>mapped remnant vegetation</u> is less than 200 metres; and</p> <p>e) reduce the total extent of <u>mapped remnant vegetation</u> to less than 30%; and</p> <p>f) occur where the total extent of <u>mapped remnant vegetation</u> is less than 30%.</p>
<p><b>PR Xb.6: Salinity</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing does not contribute to—</p> <p>a) waterlogging; or</p> <p>b) the <u>salinisation</u> of <u>groundwater</u>, surface water or soil.</p>	<p><b>AS Xb.6</b> Xb.6.1 Where clearing is less than—</p> <p>a) 2 hectares; or</p> <p>b) 10 metres wide;</p> <p>OR</p> <p>Xb.6.2 Clearing does not occur:</p> <p>a) in any <u>discharge area</u>; and</p> <p>b) within 200 metres of any <u>discharge area</u>.</p>
<p><b>PR Xb.7 Conserving remnant vegetation that are <i>endangered</i> regional ecosystems and of concern regional ecosystems</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are <i>endangered</i> regional ecosystems and <i>of concern</i> regional ecosystems—<u>maintain the current extent</u> of <i>endangered</i> regional ecosystems and <i>of concern</i> regional ecosystems.</p>	<p><b>AS Xb.7</b> Xb.7.1 Clearing—</p> <p>a) does not occur in an <i>endangered</i> regional ecosystem or an <i>of concern</i> regional ecosystem that is listed in Table 2; and</p> <p>b) in an <i>endangered</i> regional ecosystem or an <i>of concern</i> regional ecosystem that is not listed in Table 2 only occurs where the clearing is less than 10 metres wide or 0.5 hectares.</p>
<p><b>PR Xb.8: Essential habitat</b> To regulate the clearing of vegetation in a way that prevents the loss of biodiversity—<u>maintain the current extent</u> of <u>essential</u></p>	<p><b>AS Xb.8</b> Xb.8.1 Clearing does not occur in an area which is shown as <u>essential habitat</u> on the <u>essential habitat map</u>.</p>

<b>Performance requirement</b>	<b>Acceptable solution</b> <i>(applicants can propose an alternative solution to meet the performance requirement)</i>
<u>habitat.</u>	
<p><b>PR Xb.9: Conservation status thresholds</b> To regulate the clearing of vegetation in a way that conserves remnant vegetation that are regional ecosystems and prevents the loss of biodiversity—<u>maintain the current extent</u> of regional ecosystems listed in Table 3.</p>	<p><b>AS Xb.9</b> Xb.9.1 Clearing in a regional ecosystem listed in Table 3, does not occur unless the clearing is less than 2 hectares.</p>
<p><b>PR Xb.10: Acid sulfate soils</b> To regulate the clearing of vegetation in a way that does not cause land degradation and maintains ecological processes—clearing activities do not result in disturbance of acid sulfate soils or changes to the hydrology of the location that will either— a) aerate horizons containing iron sulfides; or b) mobilise acid and/or metals.</p>	<p><b>AS Xb.10</b> Xb.10.1 Clearing in <u>land zone 1</u>, <u>land zone 2</u> or <u>land zone 3</u> in areas below 5 metre Australian Height Datum— a) is carried out in accordance with an acid sulfate soils environmental management plan as outlined in the <i>State Planning Policy 2/02 Guideline: Planning and Managing Development involving Acid Sulfate Soils</i>; and b) follows management principles in accordance with the Soil Management Guidelines in the <i>Queensland Acid Sulfate Soil Technical Manual</i>.</p>

## Tables

**Table 1: Distance from the high banks of watercourses in which clearing cannot occur**

Stream Order	Subregion	Distance from Each High Bank
1, 2, 3, or 4	The Wet Tropics Bioregion and Subregions 8. 2 (Proserpine-Sarina Lowlands) and 8.6 (Debella) of the Central Queensland Coast Bioregion	25 metres
1, 2, 3, or 4	All other Subregions of the Central Queensland Coast Bioregion	50 metres
5 or greater	The Wet Tropics Bioregion and Subregions 8. 2 (Proserpine-Sarina Lowlands) and 8.6 (Debella) of the Central Queensland Coast Bioregion	50 metres
5 or greater	All other Subregions of the Central Queensland Coast Bioregion	100 metres

**Table 2: Dense regional ecosystems and mid-dense wet sclerophyll, melaleuca, mangrove and wetland regional ecosystems**

<b>3.3.2</b> Semi-deciduous mesophyll/notophyll vine forest. Occurs on alluvia
<b>7.1.4</b> Mangrove and vine forest communities of the brackish zone.
<b>7.2.1</b> Mesophyll vine forest of very wet coastal lowlands on beach sands
<b>7.2.2</b> Notophyll to microphyll vine forest. Species commonly include <i>Cupaniopsis anacardioides</i> , <i>Diospyros geminata</i> , <i>Canarium australianum</i> , <i>Alphitonia excelsa</i> , <i>Acacia crassicarpa</i> , <i>A. mangium</i> , <i>Hibiscus tiliaceus</i> , <i>Pleiogynium timorense</i> , <i>Chionanthus ramiflora</i> , <i>Blepharocarya involucrigera</i> , <i>Mimusops elengi</i> , <i>Polyalthia nitidissima</i> , <i>Pongamia pinnata</i> , <i>Geijera latifolia</i> , <i>Ficus opposita</i> , <i>Pouteria sericea</i> , <i>Terminalia muelleri</i> , <i>T. arenicola</i> , <i>Drypetes deplanchei</i> , and <i>Exocarpos latifolius</i> .
<b>7.2.5</b> Mesophyll/notophyll vine forest of <i>Syzygium forte</i> subsp. <i>forte</i> on beach ridges and sand plains of beach origin
<b>7.2.6</b> Mosaic of clumps of notophyll vine forest, sclerophyll spp. shrublands and open woodlands, and bare sand blows, on aeolian dunes
<b>7.2.9</b> <i>Melaleuca quinquenervia</i> shrubland to closed forest, or <i>Lepironia articulata</i> open to closed sedgeland
<b>7.2.10</b> Shrubland, sedgeland and heath complex with <i>Thryptomene oligandra</i> and/or <i>Asteromyrtus</i> spp., +/- <i>Melaleuca quinquenervia</i>
<b>7.3.3</b> Mesophyll vine forest with <i>Archontophoenix alexandrae</i> .
<b>7.3.4</b> Mesophyll vine forest with <i>Licuala ramsayi</i> .
<b>7.3.6</b> <i>Melaleuca dealbata</i> +/- <i>Melaleuca leucadendra</i> open forest
<b>7.3.7</b> <i>Eucalyptus pellita</i> and <i>Corymbia intermedia</i> open forest to woodland (or vine forest with emergent <i>E. pellita</i> and <i>C. intermedia</i> )
<b>7.3.10</b> Simple-complex mesophyll to notophyll vine forest.
<b>7.3.17</b> Complex mesophyll vine forest.

7.3.20 <i>Corymbia intermedia</i> and <i>Syncarpia glomulifera</i> , or <i>C. intermedia</i> and <i>Eucalyptus pellita</i> , or <i>Syncarpia glomulifera</i> and <i>Allocasuarina</i> spp., or <i>E. cloeziana</i> , or <i>C. torelliana</i>
7.3.23 Simple-complex semi-deciduous notophyll to mesophyll vine forest on lowland alluvium.
7.3.35 <i>Acacia mangium</i> and/or <i>A. celsa</i> and/or <i>A. polystachya</i> closed forest on alluvial plains
7.3.36 Complex mesophyll vine forest of high rainfall, cloudy uplands on alluvium
7.3.37 Complex semi-evergreen notophyll vine forest of uplands on alluvium
7.3.38 Complex notophyll vine forest with emergent <i>Agathis robusta</i> , on alluvial fans
7.3.42 <i>Eucalyptus grandis</i> open forest to woodland (or vine forest with emergent <i>E. grandis</i> )
7.3.49 Notophyll vine forest on rubble terraces of streams
7.8.3 Complex notophyll vine forest on moist basalt lowlands, foothills and uplands
7.8.11 Closed vineland of wind-disturbed vine forest on basalt
7.8.12 Complex notophyll vine forest dominated by <i>Backhousia bancroftii</i> .
7.8.13 Simple notophyll vine forest of <i>Blepharocarya involucrigera</i> of high rainfall, cloudy uplands on basalt
7.8.14 Complex notophyll vine forest with emergent <i>Agathis robusta</i> , on basalt
7.8.15 <i>Eucalyptus grandis</i> open forest to woodland (or vine forest with <i>E. grandis</i> emergents)
7.11.2 Notophyll or mesophyll vine forest with <i>Archontophoenix alexandrae</i> or <i>Licuala ramsayi</i> .
7.11.3 Semi-deciduous mesophyll vine forest on moist metamorphic foothill slopes
7.11.6 Simple mesophyll vine forest with <i>Syncarpia glomulifera</i> emergents on very wet to wet metamorphic lowlands and foothills
7.11.8 <i>Acacia polystachya</i> woodland to closed forest, or <i>Acacia mangium</i> and <i>Acacia celsa</i> open to closed forest.
7.11.10 Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
7.11.14 Simple notophyll vine forest with <i>Eucalyptus grandis</i> emergents on moist metamorphic uplands
7.11.23 Complex mesophyll vine forest on fertile, well drained metamorphics of very wet and wet footslopes
7.11.24 Closed vineland of wind-disturbed vine forest, on metamorphics
7.11.25 Simple-complex mesophyll to notophyll vine forest.
7.11.27 Simple microphyll vine-fern forest or microphyll vine-sedge forest of wet metamorphic uplands and highlands
7.11.28 Wind-sheared notophyll vine forest of exposed metamorphic ridge-crests and steep slopes
7.11.29 Microphyll to notophyll vine forests with <i>Ceratopetalum virchowii</i> and/or <i>Uromyrtus metrosideros</i> , <i>Flindersia bourjotiana</i> , <i>F. pimenteliana</i> and <i>Beilschmiedia oligandra</i> +/- emergent <i>Licuala ramsayi</i> and <i>Oraniopsis appendiculata</i> , and associated sedgelands
7.11.30 Simple notophyll vine forest of <i>Blepharocarya involucrigera</i> on metamorphics
7.11.31 <i>Eucalyptus resinifera</i> +/- <i>Eucalyptus portuensis</i> +/- <i>Syncarpia glomulifera</i> open forest to woodland (or vine forest with these species as emergents)

<b>7.11.32</b> <i>Syncarpia glomulifera</i> and/or <i>Allocasuarina</i> spp. +/- heathy understorey, woodland to tall woodland to open forest (or vine forest with these species as emergents)
<b>7.11.36</b> <i>Allocasuarina littoralis</i> , <i>Corymbia intermedia</i> , <i>Lophostemon suaveolens</i> , <i>Xanthorrhoea johnsonii</i> shrubland
<b>7.12.2</b> <i>Licuala ramsayi</i> dominated mesophyll vine forest on very wet poorly drained granite foothills
<b>7.12.4</b> Mesophyll vine forest with <i>Syncarpia glomulifera</i> emergents on very wet granite and rhyolite lowlands and foothills
<b>7.12.5</b> Simple mesophyll vine forest with <i>Eucalyptus pellita</i> emergents on very wet to wet granite lowlands and foothills
<b>7.12.6</b> Semi-deciduous mesophyll vine forest on moist granite lowlands and foothills
<b>7.12.9</b> <i>Acacia celsa</i> open to closed forest.
<b>7.12.10</b> Notophyll vine forest with emergent <i>Araucaria cunninghamii</i> .
<b>7.12.12</b> <i>Acacia mangium</i> and <i>A. celsa</i> open to closed forest or <i>A. polystachya</i> woodland to closed forest.
<b>7.12.13</b> Notophyll vine forest dominated by <i>Acacia melanoxylon</i> on cloudy wet granite and rhyolite uplands
<b>7.12.17</b> Simple notophyll vine forest with <i>Corymbia torelliana</i> emergents on moist granite and rhyolite foothills and uplands
<b>7.12.20</b> Simple microphyll vine-fern thicket.
<b>7.12.37</b> Rock pavements and seepage areas of wet lowlands, uplands and highlands of the eastern escarpment and central range (excluding high granite areas of Hinchinbrook Island and Bishops Peak) on granite and rhyolite, with <i>Allocasuarina</i> spp. shrublands
<b>7.12.39</b> Complex mesophyll vine forest on fertile, well drained granites and rhyolites of very wet and wet lowlands, foothills and uplands
<b>7.12.40</b> Closed vineland of wind-disturbed vine forest, on granites and rhyolites
<b>7.12.41</b> <i>Podocarpus grayae</i> , <i>Callitris endlicheri</i> and <i>Acacia celsa</i> heathland/shrubland
<b>7.12.42</b> Notophyll vine forest with <i>Flindersia brayleyana</i> and <i>Argyrodendron polyandrum</i> , on wet granite uplands of Great Palm Island
<b>7.12.43</b> Simple notophyll vine forest dominated by <i>Stockwellia quadrifida</i> on granite
<b>7.12.44</b> Simple notophyll vine forest dominated by <i>Blepharocarya involucrigera</i> on granite
<b>7.12.45</b> Simple notophyll vine forest dominated by <i>Dryadodaphne</i> sp. (Mt Lewis B.P. Hyland+ RFK1496).
<b>7.12.46</b> Microphyll vine forest with <i>Gossia bidwillii</i> +/- <i>Araucaria cunninghamii</i> , on steep rock granite talus and boulder slopes of the Palm Islands
<b>7.12.47</b> Notophyll-microphyll semi-evergreen vine forest with <i>Argyrodendron polyandrum</i> emergents, on rhyolite
<b>7.12.48</b> Wind-sheared notophyll vine forest of exposed granite and rhyolite ridge-crests and steep slopes
<b>7.12.49</b> Notophyll vine forest and thicket with <i>Pouteria euphlebia</i> and <i>Podocarpus grayae</i> on granite

<b>7.12.50</b> Simple microphyll vine-fern forest.
<b>7.12.51</b> <i>Eucalyptus resinifera</i> , <i>Syncarpia glomulifera</i> , <i>E. portuensis</i> , <i>Corymbia abergiana</i> , +/- <i>C. leptoloma</i> woodland
<b>7.12.52</b> <i>Eucalyptus resinifera</i> , <i>Corymbia intermedia</i> , <i>Allocasuarina littoralis</i> , <i>Syncarpia glomulifera</i> , <i>E. drepanophylla</i> +/- <i>E. reducta</i> (Queensland stringybark) woodland
<b>7.12.64</b> Heathlands with <i>Xanthorrhoea</i> spp., <i>Allocasuarina littoralis</i> , <i>Banksia plagiocarpa</i> (blue banksia) +/- <i>Leptospermum polygalifolium</i> +/- <i>Rhodomyrtus trineura</i> subsp. <i>trineura</i> , and associated rock pavement
<b>7.12.68</b> Complex notophyll vine forest of cloudy moist to wet highlands on granite
<b>8.2.2</b> Microphyll vine forest on coastal dunes
<b>8.2.5</b> Notophyll feather palm vine forest dominated by <i>Archontophoenix cunninghamiana</i> on parabolic dunes
<b>8.2.11</b> <i>Melaleuca</i> spp. woodland in parallel dune swales (wetlands)
<b>8.3.1</b> Semi-deciduous notophyll/mesophyll vine forest fringing watercourses on alluvial plains
<b>8.3.8</b> <i>Syncarpia glomulifera</i> , <i>Eucalyptus portuensis</i> , <i>Corymbia intermedia</i> open forest on sandy creek flats and granite outwash
<b>8.3.9</b> Complex notophyll vine forest on perched alluvials in valleys of undulating mountain ranges
<b>8.3.10</b> Notophyll vine forest with variable dominants, on gently to moderately sloping alluvial fans adjacent to ranges
<b>8.3.11</b> <i>Melaleuca</i> sp. aff. <i>viridiflora</i> closed forest to woodland in broad drainage areas (wetlands)
<b>8.8.1</b> Complex notophyll vine forest on Tertiary basalt
<b>8.10.1</b> <i>Acacia julifera</i> subsp. <i>julifera</i> and/or <i>Eucalyptus</i> spp. ± <i>Corymbia</i> spp. ± <i>Allocasuarina luehmannii</i> ± <i>Acacia</i> spp. open-forest to woodland on exposed slopes of islands, on Cretaceous sedimentary rocks
<b>8.11.2</b> Notophyll microphyll vine forest ± <i>Araucaria cunninghamii</i> on low ranges on Permian sediments ± volcanics
<b>8.11.10</b> <i>Lophostemon confertus</i> and/or <i>Acacia</i> spp. and/or <i>Allocasuarina littoralis</i> ± <i>Corymbia</i> spp. ± <i>Eucalyptus</i> spp. ± <i>Melaleuca viridiflora</i> low woodland to open-forest on exposed hillslopes of islands, on metamorphosed sediments
<b>8.12.8</b> <i>Eucalyptus montivaga</i> and/or <i>E. resinifera</i> open forest on plateaus of high ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.10</b> <i>Lophostemon confertus</i> ± <i>Leptospermum neglectum</i> ± <i>Hibiscus divaricatus</i> ± <i>Callistemon pearsonii</i> ± <i>Bertya sharpeana</i> shrubland or heathland on exposed plateaus of Cretaceous-Tertiary acid to intermediate volcanics, and Mesozoic to Proterozoic igneous rocks
<b>8.12.16</b> Low microphyll vine forest to semi-evergreen vine thicket on drier sub coastal hills on Mesozoic to Proterozoic igneous rocks
<b>8.12.17</b> Notophyll mossy evergreen vine forest on mountain slopes and summits subject to regular mist cover, on Mesozoic to Proterozoic igneous rocks
<b>8.12.28</b> Low microphyll vine forest to semi-evergreen vine thicket with <i>Acacia fasciculifera</i> , on foothills of low, near-coastal ranges, on acid to intermediate volcanics
<b>8.12.29</b> <i>Lophostemon confertus</i> ± <i>Acacia leptostachya</i> ± <i>Acacia aulacocarpa</i> ± <i>Corymbia</i>

<i>dallachiana</i> ± <i>Eucalyptus</i> spp. ± <i>Melaleuca viridiflora</i> ± <i>Allocasuarina littoralis</i> shrubland to open forest on exposed hillslopes of islands with abundant rock at the surface, on Me
<b>8.12.30</b> Notophyll mossy evergreen vine forest dominated by <i>Ristantia waterhousei</i> , on upper slopes and summits of mountains on rhyolite
<b>11.2.3</b> Microphyll vine forest on sandy beach ridges and dune swales
<b>11.3.11</b> Semi-evergreen vine thicket on alluvial plains

**Table 3: Regional ecosystems that are at risk of the remnant extent falling below 30% of its pre-clearing extent, or having a remnant extent of less than 10 000 hectares**

<b>8.1.2</b> Samphire open forbland to isolated clumps of forbs on salt pans and plains adjacent to mangroves. Estuarine wetland
<b>7.3.5</b> <i>Melaleuca quinquenervia</i> open forest on very wet and wet poorly drained lowlands
<b>7.8.1</b> Complex mesophyll vine forest on very wet, well drained basalt lowlands
<b>7.8.4</b> Complex notophyll vine forest on cloudy wet basalt uplands and highlands
<b>11.11.20</b> <i>Eucalyptus platyphylla</i> woodland on old sedimentary rocks with varying degrees of metamorphism and folding. Lowlands

**Table 4: Regional ecosystems where thinning cannot occur**

<b>3.3.2</b> Semi-deciduous mesophyll/notophyll vine forest. Occurs on alluvia
<b>3.11.3</b> Simple evergreen notophyll vine forest on exposed metamorphic and granitic slopes
<b>7.1.1</b> Mangrove forests on coastal lowland saline alluvial soils
<b>7.1.2</b> Salt meadow/ herbfield on coastal lowland hyper-saline alluvial soils
<b>7.1.3</b> <i>Eleocharis dulcis</i> swamp on poorly drained acid peat's
<b>7.1.4</b> Mangrove and vine forest communities of the brackish zone.
<b>7.2.1</b> Mesophyll vine forest of very wet coastal lowlands on beach sands
<b>7.2.2</b> Notophyll to microphyll vine forest. Species commonly include <i>Cupaniopsis anacardioides</i> , <i>Diospyros geminata</i> , <i>Canarium australianum</i> , <i>Alphitonia excelsa</i> , <i>Acacia crassicarpa</i> , <i>A. mangium</i> , <i>Hibiscus tiliaceus</i> , <i>Pleiogynium timorense</i> , <i>Chionanthus ramiflora</i> , <i>Blepharocarya involucrigera</i> , <i>Mimusops elengi</i> , <i>Polyalthia nitidissima</i> , <i>Pongamia pinnata</i> , <i>Geijera latifolia</i> , <i>Ficus opposita</i> , <i>Pouteria sericea</i> , <i>Terminalia muelleri</i> , <i>T. arenicola</i> , <i>Drypetes deplanchei</i> , and <i>Exocarpos latifolius</i> .
<b>7.2.5</b> Mesophyll/notophyll vine forest of <i>Syzygium forte</i> subsp. <i>forte</i> on beach ridges and sand plains of beach origin
<b>7.2.6</b> Mosaic of clumps of notophyll vine forest, <i>sclerophyll</i> spp. shrublands and open woodlands, and bare sand blows, on aeolian dunes
<b>7.2.10</b> Shrubland, sedgeland and heath complex with <i>Thryptomene oligandra</i> and/or <i>Asteromyrtus</i> spp., +/- <i>Melaleuca quinquenervia</i> on sandplains of beach origin
<b>7.3.3</b> Mesophyll vine forest with <i>Archontophoenix alexandrae</i> .
<b>7.3.4</b> Mesophyll vine forest with <i>Licuala ramsayi</i> .

7.3.10 Simple-complex mesophyll to notophyll vine forest.
7.3.17 Complex mesophyll vine forest.
7.3.23 Simple-complex semi-deciduous notophyll to mesophyll vine forest on lowland alluvium.
7.3.35 <i>Acacia mangium</i> and/or <i>A. celsa</i> and/or <i>A. polystachya</i> closed forest on alluvial plains
7.3.36 Complex mesophyll vine forest of high rainfall, cloudy uplands on alluvium
7.3.37 Complex semi-evergreen notophyll vine forest of uplands on alluvium
7.3.38 Complex notophyll vine forest with emergent <i>Agathis robusta</i> , on alluvial fans
7.3.49 Notophyll vine forest on rubble terraces of streams
7.8.1 Complex mesophyll vine forest.
7.8.2 Complex notophyll to mesophyll vine forest.
7.8.3 Complex notophyll vine forest on moist basalt lowlands, foothills and uplands
7.8.4 Complex notophyll vine forest on cloudy wet basalt uplands and highlands
7.8.11 Closed vineland of wind-disturbed vine forest on basalt
7.8.12 Complex notophyll vine forest dominated by <i>Backhousia bancroftii</i> .
7.8.13 Simple notophyll vine forest of <i>Blepharocarya involucrigera</i> of high rainfall, cloudy uplands on basalt
7.8.14 Complex notophyll vine forest with emergent <i>Agathis robusta</i> , on basalt
7.11.1 Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
7.11.2 Notophyll or mesophyll vine forest with <i>Archontophoenix alexandrae</i> or <i>Licuala ramsayi</i> ..
7.11.3 Semi-deciduous mesophyll vine forest on moist metamorphic foothill slopes
7.11.6 Simple mesophyll vine forest with <i>Syncarpia glomulifera</i> emergents on very wet to wet metamorphic lowlands and foothills
7.11.7 Complex notophyll vine forest with <i>Agathis robusta</i> emergents on moist metamorphic foothills and uplands
7.11.8 <i>Acacia polystachya</i> woodland to closed forest, or <i>Acacia mangium</i> and <i>Acacia celsa</i> open to closed forest.
7.11.10 Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
7.11.12 Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
7.11.14 Simple notophyll vine forest with <i>Eucalyptus grandis</i> emergents on moist metamorphic uplands
7.11.23 Complex mesophyll vine forest on fertile, well drained metamorphics of very wet and wet footslopes
7.11.24 Closed vineland of wind-disturbed vine forest, on metamorphics
7.11.25 Simple-complex mesophyll to notophyll vine forest.
7.11.26 Rock pavements with <i>Allocasuarina littoralis</i> and <i>Syncarpia glomulifera</i> open to closed shrublands or <i>Bombax ceiba</i> and <i>Cochlospermum gillivraei</i> open woodland, or <i>Acacia</i> spp. shrubland, on metamorphics

<b>7.11.27</b> Simple microphyll vine-fern forest or microphyll vine-sedge forest of wet metamorphic uplands and highlands
<b>7.11.28</b> Wind-sheared notophyll vine forest of exposed metamorphic ridge-crests and steep slopes
<b>7.11.29</b> Microphyll to notophyll vine forests with <i>Ceratopetalum virchowii</i> and/or <i>Uromyrtus metrosideros</i> , <i>Flindersia bourjotiana</i> , <i>F. pimenteliana</i> and <i>Beilschmiedia oligandra</i> +/- emergent <i>Licuala ramsayi</i> and <i>Oraniopsis appendiculata</i> , and associated sedgeland
<b>7.11.30</b> Simple notophyll vine forest of <i>Blepharocarya involucrigera</i> on metamorphics
<b>7.11.36</b> <i>Allocasuarina littoralis</i> , <i>Corymbia intermedia</i> , <i>Lophostemon suaveolens</i> , shrubland with <i>Xanthorrhoea johnsonii</i> , on serpentinite foothills, with deep red soils
<b>7.12.1</b> Mesophyll vine forest on very wet to wet, granite lowlands and foothills
<b>7.12.2</b> <i>Licuala ramsayi</i> dominated mesophyll vine forest on very wet poorly drained granite foothills
<b>7.12.4</b> Mesophyll vine forest with <i>Syncarpia glomulifera</i> emergents on very wet granite and rhyolite lowlands and foothills
<b>7.12.5</b> Simple mesophyll vine forest with <i>Eucalyptus pellita</i> emergents on very wet to wet granite lowlands and foothills
<b>7.12.6</b> Semi-deciduous mesophyll vine forest on moist granite lowlands and foothills
<b>7.12.7</b> Complex notophyll vine forest with emergent <i>Agathis robusta</i> on moist granite foothills and uplands
<b>7.12.9</b> <i>Acacia celsa</i> open to closed forest.
<b>7.12.10</b> Notophyll vine forest with emergent <i>Araucaria cunninghamii</i> .
<b>7.12.11</b> Notophyll semi-evergreen vine forest on moist to dry granite foothills and uplands
<b>7.12.12</b> <i>Acacia mangium</i> and <i>A. celsa</i> open to closed forest or <i>A. polystachya</i> woodland to closed forest.
<b>7.12.13</b> Notophyll vine forest dominated by <i>Acacia melanoxylon</i> on cloudy wet granite and rhyolite uplands
<b>7.12.16</b> Simple notophyll vine forest on cloudy wet granite and rhyolite uplands and highlands
<b>7.12.17</b> Simple notophyll vine forest with <i>Corymbia torelliana</i> emergents on moist granite and rhyolite foothills and uplands
<b>7.12.19</b> Simple microphyll vine forest on cloudy wet granite highlands
<b>7.12.20</b> Simple microphyll vine-fern thicket.
<b>7.12.39</b> Complex mesophyll vine forest on fertile, well drained granites and rhyolites of very wet and wet lowlands, foothills and uplands
<b>7.12.40</b> Closed vineland of wind-disturbed vine forest, on granites and rhyolites
<b>7.12.41</b> <i>Podocarpus grayae</i> , <i>Callitris endlicheri</i> and <i>Acacia celsa</i> heathland/shrubland
<b>7.12.42</b> Notophyll vine forest with <i>Flindersia brayleyana</i> and <i>Argyrodendron polyandrum</i> , on wet granite uplands of Great Palm Island
<b>7.12.43</b> Simple notophyll vine forest dominated by <i>Stockwellia quadrifida</i> on granite
<b>7.12.44</b> Simple notophyll vine forest dominated by <i>Blepharocarya involucrigera</i> on granite

<b>7.12.45</b> Simple notophyll vine forest dominated by <i>Dryadodaphne</i> sp. (Mt Lewis B.P. Hyland+RFK1496).
<b>7.12.46</b> Microphyll vine forest with <i>Gossia bidwillii</i> +/- <i>Araucaria cunninghamii</i> , on steep rock granite talus and boulder slopes of the Palm Islands
<b>7.12.47</b> Notophyll-microphyll semi-evergreen vine forest with <i>Argyrodendron polyandrum</i> emergents, on rhyolite
<b>7.12.48</b> Wind-sheared notophyll vine forest of exposed granite and rhyolite ridge-crests and steep slopes
<b>7.12.49</b> Notophyll vine forest and thicket with <i>Pouteria euphlebia</i> and <i>Podocarpus grayae</i> on granite
<b>7.12.50</b> Simple microphyll vine-fern forest.
<b>7.12.54</b> Complex of shrublands and low open forests on wind-exposed granite and rhyolite coastal headlands and islands, on skeletal soils
<b>7.12.57</b> Shrubland and low woodland mosaic with <i>Syncarpia glomulifera</i> , <i>Corymbia abergiana</i> , <i>Eucalyptus portuensis</i> , <i>Allocasuarina littoralis</i> , and <i>Xanthorrhoea johnsonii</i> , on moist and dry uplands and highlands on granite and rhyolite
<b>7.12.64</b> Heathlands with <i>Xanthorrhoea</i> spp., <i>Allocasuarina littoralis</i> , <i>Banksia plagiocarpa</i> +/- <i>Leptospermum polygalifolium</i> +/- <i>Rhodomyrtus trineura</i> subsp. <i>trineura</i> , and associated rock pavements, of wet granite uplands and highlands of Hinchinbrook Island and the vicinity of Bishops Peak
<b>7.12.65</b> Rock pavements or areas of skeletal soil, on granite and rhyolite, mostly of dry western or southern areas, often with shrublands to closed forests of <i>Acacia</i> spp. and/or <i>Lophostemon suaveolens</i> and/or <i>Allocasuarina littoralis</i> and/or <i>Eucalyptus lockyeri</i> subsp. <i>exuta</i>
<b>7.12.66</b> Exposed rocky slopes on granite and rhyolite, with <i>Lophostemon confertus</i> low shrubland or low to medium closed forest
<b>7.12.68</b> Complex notophyll vine forest of cloudy moist to wet highlands on granite
<b>8.10.1</b> <i>Acacia julifera</i> subsp. <i>julifera</i> and/or <i>Eucalyptus</i> spp. ± <i>Corymbia</i> spp. ± <i>Allocasuarina luehmannii</i> ± <i>Acacia</i> spp. open-forest to woodland on exposed slopes of islands, on Cretaceous sedimentary rocks
<b>8.1.1</b> Mangrove vegetation of marine clay plains and estuaries.
<b>8.11.10</b> <i>Lophostemon confertus</i> and/or <i>Acacia</i> spp. and/or <i>Allocasuarina littoralis</i> ± <i>Corymbia</i> spp. ± <i>Eucalyptus</i> spp. ± <i>Melaleuca viridiflora</i> low woodland to open
<b>8.1.2</b> Samphire open forbland to isolated clumps of forbs on saltpans and plains adjacent to mangroves.
<b>8.11.9</b> Grassland, or <i>Xanthorrhoea latifolia</i> subsp. <i>Latifolia</i> shrubland/ heathland with <i>Themeda triandra</i> and/or <i>Heteropogon contortus</i> on exposed rocky headlands on metamorphosed sediments, subject to strong sea-breezes and salt-laden winds
<b>8.1.3</b> <i>Sporobolus virginicus</i> grassland on marine sediments.
<b>8.1.5</b> <i>Melaleuca</i> spp. and/or <i>Eucalyptus tereticornis</i> and/or <i>Corymbia tessellaris</i> woodland to open forest with a ground stratum of salt tolerant grasses and sedges, usually in a narrow zone
<b>8.2.2</b> Microphyll vine forest on coastal dunes
<b>8.2.4</b> Wet heath complex on coastal sand plains and depressions derived from coastal dunes

<b>8.2.5</b> Notophyll feather palm vine forest dominated by <i>Archontophoenix cunninghamiana</i> on parabolic dunes
<b>8.3.1</b> Semi-deciduous notophyll/mesophyll vine forest fringing watercourses on alluvial plains
<b>8.3.9</b> Complex notophyll vine forest on perched alluvials in valleys of undulating mountain ranges
<b>8.3.10</b> Notophyll vine forest with variable dominants, on gently to moderately sloping alluvial fans adjacent to ranges
<b>8.8.1</b> Complex notophyll vine forest on Tertiary basalt
<b>8.11.2</b> Notophyll microphyll vine forest ± <i>Araucaria cunninghamii</i> on low ranges on Permian sediments ± volcanics
<b>8.11.7</b> <i>Xanthorrhoea latifolia</i> subsp. <i>latifolia</i> and <i>Allocasuarina littoralis</i> shrubland on exposed metamorphic mountain tops
<b>8.12.1</b> Complex notophyll vine forest often with <i>Acmena resa</i> and <i>Syzygium wesa</i> , of wet uplands on Mesozoic to Proterozoic igneous rocks
<b>8.12.10</b> <i>Lophostemon confertus</i> ± <i>Leptospermum neglectum</i> ± <i>Hibiscus divaricatus</i> ± <i>Callistemon pearsonii</i> ± <i>Bertya sharpeana</i> shrubland or heathland on exposed plateaus of Cretaceous-Tertiary acid to intermediate volcanics, and Mesozoic to Proterozoic igneous rocks
<b>8.12.11</b> Semi-deciduous microphyll vine forest/thicket with emergent <i>Araucaria cunninghamii</i> in coastal areas including islands, on Mesozoic to Proterozoic igneous rocks and Tertiary acid to intermediate volcanics and granite
<b>8.12.16</b> Low microphyll vine forest to semi-evergreen vine thicket on drier sub coastal hills on Mesozoic to Proterozoic igneous rocks
<b>8.12.17</b> Notophyll mossy evergreen vine forest on mountain slopes and summits subject to regular mist cover, on Mesozoic to Proterozoic igneous rocks
<b>8.12.18</b> Notophyll to complex notophyll vine forest with <i>Argyrodendron polyandrum</i> ± <i>Argyrodendron</i> sp. (Whitsundays W.J. McDonald 5831) ± <i>Araucaria cunninghamii</i> , on near-coastal ranges and islands, on Mesozoic to Proterozoic igneous rocks
<b>8.12.19</b> Complex notophyll feather palm vine forest with <i>Argyrodendron actinophyllum</i> subsp. <i>diversifolium</i> and sub canopy of <i>Myristica globosa</i> subsp. <i>muelleri</i> , on moist, low to moderate, coastal and sub coastal ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.2</b> Notophyll to complex notophyll vine forest often with <i>Argyrodendron actinophyllum</i> subsp. <i>diversifolium</i> ± <i>A. polyandrum</i> , on drier uplands and coastal ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.3</b> Notophyll rainforest/microphyll rainforest often with <i>Argyrodendron polyandrum</i> and <i>Paraserianthes toona</i> , ± <i>Araucaria cunninghamii</i> , on low to medium ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.28</b> Low microphyll vine forest to semi-evergreen vine thicket with <i>Acacia fasciculifera</i> , on foothills of low, near-coastal ranges, on acid to intermediate volcanics
<b>8.12.30</b> Notophyll mossy evergreen vine forest dominated by <i>Ristantia waterhousei</i> , on upper slopes and summits of mountains on rhyolite
<b>8.5.7</b> <i>Melaleuca viridiflora</i> ± <i>Eucalyptus latisinensis</i> ± <i>Syncarpia glomulifera</i> ± <i>Allocasuarina littoralis</i> open woodland to open forest on Cainozoic sand plains of uncertain age and origin
<b>9.12.8</b> Semi-evergreen vine thicket on rocky outcrops and shallow soils of acid volcanic rocks

<b>9.12.34</b> Semi-evergreen vine thicket with <i>Araucaria cunninghamii</i> on steep hills on acid and intermediate volcanic rocks
<b>9.4.1</b> <i>Eucalyptus cambageana</i> woodland with a shrub layer of <i>Eremphila mitchelli</i> , <i>Canthium oleifolium</i> , <i>Flindersia maculosa</i> and <i>Lysiphyllum spp.</i> on clay lenses in Cainozoic plains
<b>9.4.2</b> <i>Eucalyptus persistens</i> or <i>E.brownii</i> open woodland with a shrub layer of <i>Eremphila mitchelli</i> , <i>Canthium oleifolium</i> , <i>Flindersia maculosa</i> and <i>Lysiphyllum spp.</i> on clay lenses in Cainozoic plains
<b>9.4.3</b> <i>Acacia harpophylla</i> and <i>Lysiphyllum carronii</i> open woodland on Cainozoic clays
<b>9.5.15</b> <i>Melaleuca monantha</i> ± <i>M.viridiflora</i> ± <i>Callitris intratropica</i> mixed low woodland on valley infill
<b>9.5.16</b> <i>Eucalyptus tetradonta</i> ± <i>Erythrophleum chlorostachys</i> woodland on Tertiary remnants
<b>11.1.1</b> <i>Sporobolus virginicus</i> grassland on marine clay plains
<b>11.1.2</b> Samphire forbland on marine clay plains
<b>11.1.4</b> Mangrove forest/woodland on marine clay plains
<b>11.2.3</b> Microphyll vine forest on sandy beach ridges and dune swales
<b>11.3.11</b> Semi-evergreen vine thicket on alluvial plains
<b>11.11.5</b> Microphyll vine forest ± <i>Araucaria cunninghamii</i> on old sedimentary rocks with varying degrees of metamorphism and folding
<b>11.12.12</b> <i>Araucaria cunninghamii</i> woodland on igneous rocks (boulder-strewn coastal hills)

**Table 5: Regional ecosystems in which mechanical clearing for the purpose of thinning cannot occur**

<b>2.3.24</b> <i>Melaleuca</i> spp. woodland-open forest on sands in channels and on levees
<b>3.3.14</b> <i>Melaleuca saligna</i> ± <i>M. viridiflora</i> , <i>Lophostemon suaveolens</i> woodland on drainage swamps
<b>7.1.5</b> <i>Melaleuca viridiflora</i> or <i>Melaleuca</i> spp. +/- <i>Acacia</i> spp. +/- mangrove spp. shrubland, open woodland and open forest on plains adjacent to mangroves
<b>7.2.8</b> <i>Melaleuca leucadendra</i> open forest to woodland on sands of beach origin
<b>7.2.9</b> <i>Melaleuca quinquenervia</i> shrubland to closed forest, or <i>Lepironia articulata</i> open to closed sedgeland on dune swales and swampy sandplains of beach origin
<b>7.2.11</b> <i>Melaleuca viridiflora</i> +/- <i>Lophostemon suaveolens</i> +/- emergent <i>Eucalyptus</i> spp. woodland to open forest, or <i>Melaleuca</i> sp. aff. <i>viridiflora</i> open forest to woodland, on swampy sandplains of beach origin
<b>7.3.1</b> Sedgeland ( <i>Cyperus</i> spp., <i>Eleocharis dulcis</i> , <i>Baumea</i> spp., <i>Scleria poiformis</i> ) and grassland ( <i>Ischaemum villosum</i> , <i>Imperata cylindrica</i> , <i>Cynodon dactylon</i> ) freshwater swamps of seasonally inundated coastal lowlands
<b>7.3.2</b> Sedgeland/grassland in freshwater swamps of seasonally inundated tableland volcanic craters and alluvial depressions
<b>7.3.5</b> <i>Melaleuca quinquenervia</i> open forest on very wet and wet poorly drained lowlands
<b>7.3.6</b> <i>Melaleuca leucadendra</i> ± <i>M. quinquenervia</i> ± <i>M. dealbata</i> open forest, ± an under storey of vine forest species, on very wet poorly drained lowlands
<b>7.3.7</b> Coastal floodplain <i>Eucalyptus tereticornis</i> / <i>Melaleuca</i> spp. open forest complex on moist to very wet poorly drained lowlands
<b>7.3.25</b> <i>Melaleuca leucadendra</i> , <i>M. fluviatilis</i> , <i>Corymbia tessellaris</i> open forest with notophyll riparian vine forest species, on levees
<b>7.3.26</b> <i>Casuarina cunninghamiana</i> riparian open forest
<b>7.3.28</b> Riparian herbfield/shrubland on river and stream bed alluvia
<b>7.3.29</b> Sedgelands and grasslands of permanently and semi-permanently inundated swamps, including areas of open water
<b>7.3.30</b> Complex of fernlands and sedgelands with emergent rainforest pioneering spp., in permanently wet peat swamps of alluvial plains
<b>7.3.31</b> <i>Lepironia articulata</i> sedgeland to open sedgeland, of permanently to semi-permanently inundated peat swamps of alluvial plains
<b>7.3.33</b> Lakes within volcanic craters, including open water, and narrow shore-line sedge fringes
<b>7.3.34</b> <i>Melaleuca</i> sp. aff. <i>viridiflora</i> open to closed forest on broad swampy drainage lines of alluvial plains
<b>7.3.50</b> <i>Melaleuca fluviatilis</i> +/- vine forest species, open to closed forest, on alluvium fringing streams
<b>7.11.42</b> <i>Eucalyptus tereticornis</i> , <i>Pandanus</i> sp., <i>Lophostemon suaveolens</i> , <i>Melaleuca dealbata</i> and <i>E. pellita</i> woodland to open forest
<b>7.12.67</b> <i>Gleichenia dicarpa</i> , <i>Gahnia sieberiana</i> , <i>Lycopodiella cernua</i> , and <i>Lycopodium deuterodensum</i> closed fernland
<b>8.1.4</b> <i>Paspalum</i> spp. and <i>Fimbristylis ferruginea</i> sedgeland/grassland (estuarine wetland). Includes areas of deep open water with clumps of <i>Schoenoplectus litoralis</i> ± <i>Eleocharis dulcis</i>

<b>8.2.7</b> <i>Melaleuca</i> spp. and/or <i>Lophostemon suaveolens</i> and/or <i>Eucalyptus robusta</i> open woodland to open forest in wetlands associated with parabolic dunes
<b>8.2.11</b> <i>Melaleuca</i> spp. woodland in parallel dune swales
<b>8.3.3</b> <i>Melaleuca leucadendra</i> or <i>M. fluviatilis</i> ± <i>Casuarina cunninghamiana</i> open forest to woodland, fringing watercourses
<b>8.3.4</b> Freshwater wetlands with permanent water and aquatic vegetation including <i>Phragmites australis</i> , <i>Nymphaea gigantea</i> , <i>Nymphoides indica</i> , <i>Eleocharis</i> spp., <i>Cyperus</i> spp., and <i>Juncus</i> spp.
<b>8.3.8</b> <i>Syncarpia glomulifera</i> , <i>Eucalyptus portuensis</i> , <i>Corymbia intermedia</i> open forest on sandy creek flats and granite outwash
<b>8.3.11</b> <i>Melaleuca</i> sp. aff. <i>viridiflora</i> closed forest to woodland in broad drainage areas
<b>8.3.13</b> <i>Eucalyptus tereticornis</i> and/or <i>Corymbia tessellaris</i> and/or <i>Melaleuca</i> spp. open woodland to open forest on alluvial and old marine plains, often adjacent to estuarine areas
<b>8.3.15</b> Open water in river channels, water holes and lagoons, and exposed stream bed and bars
<b>9.3.1</b> <i>Eucalyptus camaldulensis</i> or <i>E. tereticornis</i> ± <i>Casuarina cunninghamiana</i> ± <i>Melaleuca</i> spp. fringing woodland on channels and levees. Generally on eastern flowing rivers
<b>9.3.12</b> River beds and associated waterholes
<b>9.3.13</b> <i>Melaleuca fluviatilis</i> and/or <i>M. argentea</i> ± <i>Eucalyptus camaldulensis</i> fringing woodland on channels and levees. Generally on western flowing rivers
<b>9.3.14</b> <i>Melaleuca</i> spp. ± <i>Acacia</i> spp. ± <i>Syzygium</i> spp. ± <i>Leptospermum</i> spp. fringing woodland on channels and levees
<b>9.3.15</b> <i>Eucalyptus tereticornis</i> ± <i>Casuarina cunninghamiana</i> ± <i>Melaleuca</i> spp. fringing woodland on channels and levees
<b>11.3.25</b> <i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines

**Table 6: Immature tree densities required to be retained**

<b>Structure (the structure category of each regional ecosystem is specified in the <u>Regional Ecosystem Description Database</u>)</b>	<b>Density of <u>immature trees</u> that must be retained for each 50 metre X 50 metre (0.25 hectare) area</b>
Mid-dense	125
Sparse	75
Very sparse	50

**Table 7: Clearing native vegetation for non-native woody species control**

Percent of area covered by the non-native plant or declared weed	Clearing limitations
0-20% <u>non-native woody species crown cover</u>	No clearing of native vegetation
>20% <u>non-native woody species crown cover</u>	Clearing: a) of <u>mature trees</u> of native species does not occur b) retains the densities of <u>immature trees</u> listed in Table 6.

**Table 8: Dense regional ecosystems**

<b>3.3.2</b> Semi-deciduous mesophyll/notophyll vine forest. Occurs on alluvia
<b>3.11.3</b> Simple evergreen notophyll vine forest on exposed metamorphic and granitic slopes
<b>7.1.1</b> Mangrove low closed forest to open shrubland
<b>7.1.4</b> Mangrove and vine forest communities of the brackish zone.
<b>7.2.1</b> Mesophyll vine forest of very wet coastal lowlands on beach sands
<b>7.2.2</b> Notophyll to microphyll vine forest. Species commonly include <i>Cupaniopsis anacardioides</i> , <i>Diospyros geminata</i> , <i>Canarium australianum</i> , <i>Alphitonia excelsa</i> , <i>Acacia crassicarpa</i> , <i>A. mangium</i> , <i>Hibiscus tiliaceus</i> , <i>Pleiogynium timorense</i> , <i>Chionanthus ramiflora</i> , <i>Blepharocarya involucrigera</i> , <i>Mimusops elengi</i> , <i>Polyalthia nitidissima</i> , <i>Pongamia pinnata</i> , <i>Geijera latifolia</i> , <i>Ficus opposita</i> , <i>Pouteria sericea</i> , <i>Terminalia muelleri</i> , <i>T. arenicola</i> , <i>Drypetes deplanchei</i> , and <i>Exocarpos latifolius</i> .
<b>7.2.5</b> Mesophyll/notophyll vine forest of <i>Syzygium forte</i> subsp. <i>forte</i> on beach ridges and sand plains of beach origin
<b>7.2.6</b> Mosaic of clumps of notophyll vine forest, sclerophyll spp. shrublands and open woodlands, and bare sand blows, on aeolian dunes
<b>7.2.9</b> <i>Melaleuca quinquenervia</i> shrubland to closed forest, or <i>Lepironia articulata</i> open to closed sedgeland
<b>7.2.10</b> Shrubland, sedgeland and heath complex with <i>Thryptomene oligandra</i> and/or <i>Asteromyrtus</i> spp., +/- <i>Melaleuca quinquenervia</i>
<b>7.3.3</b> Mesophyll vine forest with <i>Archontophoenix alexandrae</i> .
<b>7.3.4</b> Mesophyll vine forest with <i>Licuala ramsayi</i> .
<b>7.3.5</b> <i>Melaleuca quinquenervia</i> and/or <i>Melaleuca cajuputi</i> closed forest to shrubland on poorly drained alluvial plains.
<b>7.3.10</b> Simple-complex mesophyll to notophyll vine forest.
<b>7.3.17</b> Complex mesophyll vine forest.
<b>7.3.23</b> Simple-complex semi-deciduous notophyll to mesophyll vine forest on lowland alluvium.
<b>7.3.35</b> <i>Acacia mangium</i> and/or <i>A. celsa</i> and/or <i>A. polystachya</i> closed forest on alluvial plains
<b>7.3.36</b> Complex mesophyll vine forest of high rainfall, cloudy uplands on alluvium
<b>7.3.37</b> Complex semi-evergreen notophyll vine forest of uplands on alluvium
<b>7.3.38</b> Complex notophyll vine forest with emergent <i>Agathis robusta</i> , on alluvial fans

<b>7.3.49</b> Notophyll vine forest on rubble terraces of streams
<b>7.8.1</b> Complex mesophyll vine forest.
<b>7.8.2</b> Complex notophyll to mesophyll vine forest.
<b>7.8.3</b> Complex notophyll vine forest on moist basalt lowlands, foothills and uplands
<b>7.8.4</b> Complex notophyll vine forest on cloudy wet basalt uplands and highlands
<b>7.8.11</b> Closed vineland of wind-disturbed vine forest on basalt
<b>7.8.12</b> Complex notophyll vine forest dominated by <i>Backhousia bancroftii</i> .
<b>7.8.13</b> Simple notophyll vine forest of <i>Blepharocarya involucrigera</i> of high rainfall, cloudy uplands on basalt
<b>7.8.14</b> Complex notophyll vine forest with emergent <i>Agathis robusta</i> , on basalt
<b>7.11.1</b> Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
<b>7.11.2</b> Notophyll or mesophyll vine forest with <i>Archontophoenix alexandrae</i> or <i>Licuala ramsayi</i> .
<b>7.11.3</b> Semi-deciduous mesophyll vine forest on moist metamorphic foothill slopes
<b>7.11.6</b> Simple mesophyll vine forest with <i>Syncarpia glomulifera</i> emergents on very wet to wet metamorphic lowlands and foothills
<b>7.11.7</b> Complex notophyll vine forest with <i>Agathis robusta</i> emergents on moist metamorphic foothills and uplands
<b>7.11.8</b> <i>Acacia polystachya</i> woodland to closed forest, or <i>Acacia mangium</i> and <i>Acacia celsa</i> open to closed forest.
<b>7.11.10</b> Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
<b>7.11.12</b> Mesophyll vine forest on very wet to wet metamorphic lowlands and foothills
<b>7.11.14</b> Simple notophyll vine forest with <i>Eucalyptus grandis</i> emergents on moist metamorphic uplands
<b>7.11.23</b> Complex mesophyll vine forest on fertile, well drained metamorphics of very wet and wet footslopes
<b>7.11.24</b> Closed vineland of wind-disturbed vine forest, on metamorphics
<b>7.11.25</b> Simple-complex mesophyll to notophyll vine forest.
<b>7.11.27</b> Simple microphyll vine-fern forest or microphyll vine-sedge forest of wet metamorphic uplands and highlands
<b>7.11.28</b> Wind-sheared notophyll vine forest of exposed metamorphic ridge-crests and steep slopes
<b>7.11.29</b> Microphyll to notophyll vine forests with <i>Ceratopetalum virchowii</i> and/or <i>Uromyrtus metrosideros</i> , <i>Flindersia bourjotiana</i> , <i>F. pimenteliana</i> and <i>Beilschmiedia oligandra</i> +/- emergent <i>Licuala ramsayi</i> and <i>Oraniopsis appendiculata</i> , and associated sedgeland
<b>7.11.30</b> Simple notophyll vine forest of <i>Blepharocarya involucrigera</i> on metamorphics
<b>7.11.36</b> <i>Allocasuarina littoralis</i> , <i>Corymbia intermedia</i> , <i>Lophostemon suaveolens</i> , <i>Xanthorrhoea johnsonii</i> shrubland
<b>7.12.1</b> Mesophyll vine forest on very wet to wet, granite lowlands and foothills
<b>7.12.2</b> <i>Licuala ramsayi</i> dominated mesophyll vine forest on very wet poorly drained granite foothills

<b>7.12.4</b> Mesophyll vine forest with <i>Syncarpia glomulifera</i> emergents on very wet granite and rhyolite lowlands and foothills
<b>7.12.5</b> Simple mesophyll vine forest with <i>Eucalyptus pellita</i> emergents on very wet to wet granite lowlands and foothills
<b>7.12.6</b> Semi-deciduous mesophyll vine forest on moist granite lowlands and foothills
<b>7.12.7</b> Complex notophyll vine forest with emergent <i>Agathis robusta</i> on moist granite foothills and uplands
<b>7.12.9</b> <i>Acacia celsa</i> open to closed forest.
<b>7.12.10</b> Notophyll vine forest with emergent <i>Araucaria cunninghamii</i> .
<b>7.12.11</b> Notophyll semi-evergreen vine forest on moist to dry granite foothills and uplands
<b>7.12.12</b> <i>Acacia mangium</i> and <i>A. celsa</i> open to closed forest or <i>A. polystachya</i> woodland to closed forest.
<b>7.12.13</b> Notophyll vine forest dominated by <i>Acacia melanoxylon</i> on cloudy wet granite and rhyolite uplands
<b>7.12.16</b> Simple notophyll vine forest on cloudy wet granite and rhyolite uplands and highlands
<b>7.12.17</b> Simple notophyll vine forest with <i>Corymbia torelliana</i> emergents on moist granite and rhyolite foothills and uplands
<b>7.12.19</b> Simple microphyll vine forest on cloudy wet granite highlands
<b>7.12.20</b> Simple microphyll vine-fern thicket.
<b>7.12.37</b> Rock pavements and seepage areas of wet lowlands, uplands and highlands of the eastern escarpment and central range (excluding high granite areas of Hinchinbrook Island and Bishops Peak) on granite and rhyolite, with <i>Allocasuarina</i> spp. shrublands
<b>7.12.39</b> Complex mesophyll vine forest on fertile, well drained granites and rhyolites of very wet and wet lowlands, foothills and uplands
<b>7.12.40</b> Closed vineland of wind-disturbed vine forest, on granites and rhyolites
<b>7.12.41</b> <i>Podocarpus grayae</i> , <i>Callitris endlicheri</i> and <i>Acacia celsa</i> heathland/shrubland
<b>7.12.42</b> Notophyll vine forest with <i>Flindersia brayleyana</i> and <i>Argyrodendron polyandrum</i> , on wet granite uplands of Great Palm Island
<b>7.12.43</b> Simple notophyll vine forest dominated by <i>Stockwellia quadrifida</i> on granite
<b>7.12.44</b> Simple notophyll vine forest dominated by <i>Blepharocarya involucrigera</i> on granite
<b>7.12.45</b> Simple notophyll vine forest dominated by <i>Dryadodaphne</i> sp. (Mt Lewis B.P. Hyland+ RFK1496).
<b>7.12.46</b> Microphyll vine forest with <i>Gossia bidwillii</i> +/- <i>Araucaria cunninghamii</i> , on steep rock granite talus and boulder slopes of the Palm Islands
<b>7.12.47</b> Notophyll-microphyll semi-evergreen vine forest with <i>Argyrodendron polyandrum</i> emergents, on rhyolite
<b>7.12.48</b> Wind-sheared notophyll vine forest of exposed granite and rhyolite ridge-crests and steep slopes
<b>7.12.49</b> Notophyll vine forest and thicket with <i>Pouteria euphlebia</i> and <i>Podocarpus grayae</i> on granite

<b>7.12.50</b> Simple microphyll vine-fern forest.
<b>7.12.64</b> Heathlands with <i>Xanthorrhoea</i> spp., <i>Allocasuarina littoralis</i> , <i>Banksia plagiocarpa</i> (blue banksia) +/- <i>Leptospermum polygalifolium</i> +/- <i>Rhodomyrtus trineura</i> subsp. <i>trineura</i> , and associated rock pavem
<b>7.12.68</b> Complex notophyll vine forest of cloudy moist to wet highlands on granite
<b>8.2.2</b> Microphyll vine forest on coastal dunes
<b>8.2.4</b> Wet heath complex on coastal sand plains and depressions derived from coastal dunes
<b>8.2.5</b> Notophyll feather palm vine forest dominated by <i>Archontophoenix cunninghamiana</i> on parabolic dunes
<b>8.3.1</b> Semi-deciduous notophyll/mesophyll vine forest fringing watercourses on alluvial plains
<b>8.3.9</b> Complex notophyll vine forest on perched alluvials in valleys of undulating mountain ranges
<b>8.3.10</b> Notophyll vine forest with variable dominants, on gently to moderately sloping alluvial fans adjacent to ranges
<b>8.8.1</b> Complex notophyll vine forest on Tertiary basalt
<b>8.10.1</b> <i>Acacia julifera</i> subsp. <i>julifera</i> and/or <i>Eucalyptus</i> spp. ± <i>Corymbia</i> spp. ± <i>Allocasuarina luehmannii</i> ± <i>Acacia</i> spp. open-forest to woodland on exposed slopes of islands, on Cretaceous sedimentary rocks
<b>8.11.10</b> <i>Lophostemon confertus</i> and/or <i>Acacia</i> spp. and/or <i>Allocasuarina littoralis</i> ± <i>Corymbia</i> spp. ± <i>Eucalyptus</i> spp. ± <i>Melaleuca viridiflora</i> low woodland to open
<b>8.11.2</b> Notophyll microphyll vine forest ± <i>Araucaria cunninghamii</i> on low ranges on Permian sediments ± volcanics
<b>8.12.1</b> Complex notophyll vine forest often with <i>Acmena resa</i> and <i>Syzygium wesa</i> , of wet uplands on Mesozoic to Proterozoic igneous rocks
<b>8.12.2</b> Notophyll to complex notophyll vine forest often with <i>Argyrodendron actinophyllum</i> subsp. <i>diversifolium</i> ± <i>A. polyandrum</i> , on drier uplands and coastal ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.3</b> Notophyll rainforest/microphyll rainforest often with <i>Argyrodendron polyandrum</i> and <i>Paraserianthes toona</i> , ± <i>Araucaria cunninghamii</i> , on low to medium ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.10</b> <i>Lophostemon confertus</i> ± <i>Leptospermum neglectum</i> ± <i>Hibiscus divaricatus</i> ± <i>Callistemon pearsonii</i> ± <i>Bertya sharpeana</i> shrubland or heathland on exposed plateaus of Cretaceous-Tertiary acid to intermediate volcanics, and Mesozoic to Proterozoic igneous rocks
<b>8.12.11</b> Semi-deciduous microphyll vine forest/thicket with emergent <i>Araucaria cunninghamii</i> in coastal areas including islands, on Mesozoic to Proterozoic igneous rocks and Tertiary acid to intermediate volcanics and granite
<b>8.12.16</b> Low microphyll vine forest to semi-evergreen vine thicket on drier sub coastal hills on Mesozoic to Proterozoic igneous rocks
<b>8.12.17</b> Notophyll mossy evergreen vine forest on mountain slopes and summits subject to regular mist cover, on Mesozoic to Proterozoic igneous rocks
<b>8.12.18</b> Notophyll to complex notophyll vine forest with <i>Argyrodendron polyandrum</i> ± <i>Argyrodendron</i> sp. (Whitsundays W.J. McDonald 5831) ± <i>Araucaria cunninghamii</i> , on near-coastal ranges and islands, on Mesozoic to Proterozoic igneous rocks

<b>8.12.19</b> Complex notophyll feather palm vine forest with <i>Argyrodendron actinophyllum</i> subsp. <i>diversifolium</i> and sub canopy of <i>Myristica globosa</i> subsp. <i>muelleri</i> , on moist, low to moderate, coastal and sub coastal ranges on Mesozoic to Proterozoic igneous rocks
<b>8.12.28</b> Low microphyll vine forest to semi-evergreen vine thicket with <i>Acacia fasciculifera</i> , on foothills of low, near-coastal ranges, on acid to intermediate volcanics
<b>8.12.29</b> <i>Lophostemon confertus</i> ± <i>Acacia leptostachya</i> ± <i>Acacia aulacocarpa</i> ± <i>Corymbia dallachiana</i> ± <i>Eucalyptus</i> spp. ± <i>Melaleuca viridiflora</i> ± <i>Allocasuarina littoralis</i> shrubland to open forest on exposed hillslopes of islands with abundant rock at the surface, on Me
<b>8.12.30</b> Notophyll mossy evergreen vine forest dominated by <i>Ristantia waterhousei</i> , on upper slopes and summits of mountains on rhyolite
<b>9.12.8</b> Semi-evergreen vine thicket on rocky outcrops and shallow soils of acid volcanic rocks
<b>9.12.34</b> Semi-evergreen vine thicket with <i>Araucaria cunninghamii</i> on steep hills on acid and intermediate volcanic rocks
<b>11.2.3</b> Microphyll vine forest on sandy beach ridges and dune swales
<b>11.3.11</b> Semi-evergreen vine thicket on alluvial plains
<b>11.11.5</b> Microphyll vine forest ± <i>Araucaria cunninghamii</i> on old sedimentary rocks with varying degrees of metamorphism and folding

**Table 9: Fodder species**

Common name	Scientific Name
Mulga	<i>Acacia aneura</i>
Ironwood	<i>Acacia excelsa</i>
Myall	<i>Acacia pendula</i>
Red Ash	<i>Alphitonia excelsa</i>
Leopardwood	<i>Flindersia maculosa</i>
Wilga, Tree Wilga	<i>Geijera parviflora</i>
Umbrella Mulga,	<i>Acacia cibaria</i> ( <i>Acacia brachystachya</i> ),
Bastard (Turpentine) Mulga	<i>Acacia stowardii</i>

**Table 10: Mature tree size limits**

Genus	Diameter at 1.3 metres high (add the diameter of all stems for multi-stemmed plants)
Eucalyptus, Corymbia, Angophora, Lophostemon	>40 centimetres
Genera other than Eucalyptus, Corymbia, Angophora and Lophostemon	>20 centimetres

**Table 11: Size classes**

Class	Diameter at breast height over bark
1	< 5 centimetres
2	5 - 10 centimetres
3	>10 - 20 centimetres
4	> 20 - 40 centimetres

**Table 12: Wetland regional ecosystems**

<b>3.3.14</b> <i>Melaleuca saligna</i> ± <i>M. viridiflora</i> , <i>Lophostemon suaveolens</i> woodland on drainage swamps
<b>7.1.5</b> <i>Melaleuca viridiflora</i> or <i>Melaleuca</i> spp. +/- <i>Acacia</i> spp. +/- mangrove spp. shrubland, open woodland and open forest on plains adjacent to mangroves
<b>7.2.8</b> <i>Melaleuca leucadendra</i> open forest to woodland on sands of beach origin
<b>7.2.9</b> <i>Melaleuca quinquenervia</i> shrubland to closed forest, or <i>Lepironia articulata</i> open to closed sedgeland on dune swales and swampy sandplains of beach origin
<b>7.2.11</b> <i>Melaleuca viridiflora</i> +/- <i>Lophostemon suaveolens</i> +/- emergent <i>Eucalyptus</i> spp. woodland to open forest, or <i>Melaleuca</i> sp. aff. <i>viridiflora</i> open forest to woodland, on swampy sandplains of beach origin
<b>7.3.1</b> Sedgeland ( <i>Cyperus</i> spp., <i>Eleocharis dulcis</i> , <i>Baumea</i> spp., <i>Scleria poiformis</i> ) and grassland ( <i>Ischaemum villosum</i> , <i>Imperata cylindrica</i> , <i>Cynodon dactylon</i> ) freshwater swamps of seasonally inundated coastal lowlands
<b>7.3.2</b> Sedgeland/grassland in freshwater swamps of seasonally inundated tableland volcanic craters and alluvial depressions
<b>7.3.5</b> <i>Melaleuca quinquenervia</i> open forest on very wet and wet poorly drained lowlands
<b>7.3.6</b> <i>Melaleuca leucadendra</i> ± <i>M. quinquenervia</i> ± <i>M. dealbata</i> open forest, ± an under storey of vine forest species, on very wet poorly drained lowlands
<b>7.3.7</b> Coastal floodplain <i>Eucalyptus tereticornis</i> / <i>Melaleuca</i> spp. open forest complex on moist to very wet poorly drained lowlands
<b>7.3.28</b> Rivers and streams including riparian herbfield and shrubland on river and stream bed alluvium, and rock within stream beds
<b>7.3.29</b> Sedgelands and grasslands of permanently and semi-permanently inundated swamps, including areas of open water
<b>7.3.30</b> Complex of fernlands and sedgelands with emergent rainforest pioneering spp., in permanently wet peat swamps of alluvial plains
<b>7.3.31</b> <i>Lepironia articulata</i> sedgeland to open sedgeland, of permanently to semi-permanently inundated peat swamps of alluvial plains
<b>7.3.33</b> Lakes within volcanic craters, including open water, and narrow shore-line sedge fringes
<b>7.3.34</b> <i>Melaleuca</i> sp. aff. <i>viridiflora</i> open to closed forest on broad swampy drainage lines of alluvial plains
<b>7.11.42</b> <i>Eucalyptus tereticornis</i> , <i>Pandanus</i> sp., <i>Lophostemon suaveolens</i> , <i>Melaleuca dealbata</i> and <i>E. pellita</i> woodland to open forest, in perched drainage areas on peats on metamorphic rocks
<b>7.12.67</b> <i>Gleichenia dicarpa</i> , <i>Gahnia sieberiana</i> , <i>Lycopodiella cernua</i> , <i>Lycopodium deuterodensum</i>

closed fernland of granite highlands, on Thornton Peak and Mt Bartle Frere
<b>8.1.4</b> <i>Paspalum</i> spp. and <i>Fimbristylis ferruginea</i> sedgeland/grassland (estuarine wetland). Includes areas of deep open water with clumps of <i>Schoenoplectus litoralis</i> ± <i>Eleocharis dulcis</i>
<b>8.2.7</b> <i>Melaleuca</i> spp. and/or <i>Lophostemon suaveolens</i> and/or <i>Eucalyptus robusta</i> open woodland to open forest in wetlands associated with parabolic dunes
<b>8.2.11</b> <i>Melaleuca</i> spp. woodland in parallel dune swales
<b>8.3.4</b> Freshwater wetlands with permanent water and aquatic vegetation including <i>Phragmites australis</i> , <i>Nymphaea gigantea</i> , <i>Nymphoides indica</i> , <i>Eleocharis</i> spp., <i>Cyperus</i> spp., and <i>Juncus</i> spp.
<b>8.3.11</b> <i>Melaleuca</i> sp. aff. <i>viridiflora</i> closed forest to woodland in broad drainage areas
<b>8.3.13</b> <i>Eucalyptus tereticornis</i> and/or <i>Corymbia tessellaris</i> and/or <i>Melaleuca</i> spp. open woodland to open forest on alluvial and old marine plains, often adjacent to estuarine areas
<b>8.3.15</b> Open water in river channels, water holes and lagoons, and exposed stream bed and bars
<b>9.3.12</b> River beds and associated waterholes

**Table 13: Soil stability class and soils characteristics**

Soil stability class*	Soil characteristics
Stable	Soils that are Organosols (peats, organic soils), Calcarosols, Dermosols with a soil depth greater than 25 centimetres (structured loams, prairie soils, renzinas, red and yellow podzolics), Ferrosols (krasnozems, eucrozems, xanthozems), non saline Hydrosols (humic gleys), Podosols (podzols, humus podzols, coloured sands), Rudosols with a soil depth greater than 25 centimetres (lithosols, shallow stony soils), Tenosols with a soil depth greater than 25 centimetres (lithosols, alluvial soils, earthy sands);  OR Soils with no <u>dispersible</u> layers;  OR Soils with <u>dispersible</u> layers where the dispersible layer is located at a depth greater than 45 centimetres.
Unstable	Soils that are Chromosols (podzolics, acid and neutral texture contrast soils), Dermosols with a soil depth less than 25 centimetres, saline Hydrosols (Solonchaks), Kandosols (red, yellow and grey earths), Rudosols with a soil depth less than 25 centimetres, Tenosols with a soil depth less than 25 centimetres, Vertosols (cracking clays, black, grey, red and brown), Kurosols (soloths, podzolics);  OR Soils with a <u>dispersible</u> layer located between 25 and 45 centimetres deep;  OR Soils less than 45 centimetres deep.

Very Unstable	Soils that are Sodosols (solodics, solodised solonetz);  OR Soils with a <u>dispersible</u> layer located less than 25 centimetres deep;  OR Soils less than 25 centimetres deep.
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\*Where a soil meets the characteristics of two soil stability classes then the less stable class must be used.

## Glossary of terms

Where terms used in the Code are not defined in the Code but are defined in the VMA or the IPA, the definition that is in the VMA or the IPA applies to the Code.

Where the definition of a term in the Code is inconsistent with the definition of that same term in the VMA or the IPA, the definition that is in the Code prevails.

**Aerial application** is—  
application by aircraft.

**Application area** is—  
the area identified as proposed for clearing in the Property Vegetation Management Plan.

**Assessable vegetation** is—  
vegetation in which clearing is assessable development under Schedule 8, Part 1, Table 4 items 1A-1G of the *Integrated Planning Act 1997*

**Discharge area** is—  
an area identified as a discharge area by an assessment process that is consistent with the document: *Salinity Management Handbook*, Queensland's Department of Natural Resources, 1997.

**Dispersible** is—  
a soil that dissolves into its constituent particles—clay, silt, sand—when immersed in distilled water, determined after a period of 2 hours.

**Essential habitat** —  
See section 20AC of the *Vegetation Management Act 1999*

**Essential habitat database**—  
means a database, listing essential habitat factors for protected wildlife, certified by the chief executive as an essential habitat database.

**Essential habitat factors** are—  
for protected wildlife, is a component of the wildlife's habitat, including for example, a landform, pollinator, regional ecosystem, soil and water, that is necessary or desirable for the wildlife at any stage of its lifecycle.

**Essential habitat map** is—  
a map certified by the chief executive as the essential habitat map for the State and showing, for the State, areas the chief executive reasonably believes are areas of essential habitat or essential regrowth habitat for protected wildlife.

**Fodder harvesting** is the clearing of vegetation predominantly consisting of fodder species—

- (a) necessary to provide fodder for stock; and
- (b) carried out in a way that—
  - (i) conserves the vegetation in perpetuity; and
  - (ii) conserves the regional ecosystem in which the vegetation is situated; and

(iii) results in the woody biomass of the cleared vegetation remaining where it is cleared.

**Fodder species** are—

only those species listed in Table 9.

**Groundwater** is—

water occurring below the surface of the ground.

**Gully erosion** is—

the removal of soil by water creating large incised channels more than 30 centimetres in depth.

**Hard-setting** is—

a characteristic of soils in which a compact, hard, apedal condition forms on drying, but softens in wetting. When dry, the material is hard below any surface crust or flake that may occur, and is not disturbed or indented by pressure of the forefinger.

**Immature trees** are—

all woody plants that are greater than 2 metres high, other than mature trees.

**Key Resource Area** is—

an area identified as a Key Resource Area in the State Planning Policy: Protection of Extractive Resources adopted pursuant to the provisions of the IPA in force at the date the application was properly made.

**Land Zone 1**—

quaternary estuarine and marine deposits subject to periodic inundation by saline or brackish marine waters. This includes mangroves, salt pans, off-shore tidal flats and tidal beaches.

**Land Zone 2**—

quaternary coastal dunes and beach ridges. Includes degraded dunes, sand plains and swales, lakes and swamps enclosed by dunes, as well as coral and sand cays.

**Land Zone 3**—

quaternary alluvial systems, including floodplains, alluvial plains, alluvial fans, terraces, levees, swamps, channels, closed depressions and fine textured palaeo-estuarine deposits. Also includes estuarine plains currently under fresh water influence, inland lakes and associated dune systems (lunettes).

**Maintain the current extent** requires applicants to—

- a) not clear the regional ecosystem; or
- b) if subparagraph (a) is not reasonably practicable, ensure the structure and function of the regional ecosystem is maintained; or
- c) if subparagraphs (a) and (b) are not reasonably practicable, provide an offset as a condition of the development approval.

**Mapped remnant vegetation** is—

vegetation shown on a regional ecosystem map or remnant map as remnant vegetation.

**Mass movement** is—

either a landslip, earthflow, landslide, rock avalanche or soil creep.

**Mature trees** are—

trees and shrubs which are over the size limits specified in Table 10.

**Mechanical clearing** is—

the clearing of vegetation using machinery which disturbs the soil surface or uproots woody vegetation.

**Most recent suitable imagery** is—

aerial photography or high resolution (less than 1 metre pixel size) satellite imagery—less than 10 years old—that shows the application area at a scale and clarity to allow for accurate measurement of woody species crown cover.

Information on aerial photography services offered by DERM is available from the following website:

[http://www.nrw.qld.gov.au/property/mapping/aerial\\_photography.html](http://www.nrw.qld.gov.au/property/mapping/aerial_photography.html)

**Non-native woody species crown cover** is—

determined by estimating or measuring the area of ground covered by the canopy of the non-native woody species, ignoring overlap and gaps within individual canopies, and is measured over each 50 metre x 50 metre (0.25 hectare) area.

**Past suitable imagery** is—

aerial photography or high resolution (less than 1 metre pixel size) satellite imagery—greater than 10 years old—that shows the application area at a scale and clarity to allow for accurate measurement of woody species crown cover.

Information on aerial photography services offered by DERM is available from the following website:

[http://www.nrw.qld.gov.au/property/mapping/aerial\\_photography.html](http://www.nrw.qld.gov.au/property/mapping/aerial_photography.html)

**Pest eradication plan** is—

a plan developed that aims to eradicate a plant or animal declared as a Class 1 or 2 pest under the *Land Protection (Pest and Stock Route Management) Act 2002* and that has been approved by both the Chief Executive that administers the *Land Protection (Pest and Stock Route Management) Act 2002* and the Chief Executive that administers the *Vegetation Management Act 1999*. For the purpose of this definition, Class 2 pests are outlier populations of Class 2 pests that occur outside of accepted State Government containment lines.

**Protected wildlife** is—

Native wildlife prescribed under the Nature Conservation Act as endangered, vulnerable, rare or near threatened wildlife.

**Range of sizes** are—

the size classes set out in Table 11.

**Regional Ecosystem Description Database** is—

a database prepared by the Queensland Herbarium, which can be accessed at the following internet address: <http://www.epa.qld.gov.au/projects/redd/index.cgi>

**Rill erosion** is—

the removal of soil creating small channels up to 30 centimetres deep.

**Root absorbed herbicides** are—

herbicides that are taken up through the root systems of plants, such as those with hexazinone and tebuthiuron as active ingredients.

**Salinisation** is—

the process of salts accumulating in soils or waters.

**Scalding** is—

- a) a bare area formed when the surface soil is removed by wind or water erosion, exposing a more clayey subsoil which is relatively impermeable to water; or
- b) where surface soil has been transformed into a hard-setting condition by exposure to raindrop impact or wind erosion.

**Sheet erosion** is—

the removal of a uniform layer of soil from the surface with generally no obvious channel created.

**Significant community project** is

See section 10(5) of the *Vegetation Management Act 1999*.

**Significant wetland** is—

- a) In the Baffle, Barron, Black, Boyne, Burdekin, Calliope, Daintree, Don, Fitzroy, Haughton, Herbert, Johnstone, Mossman, Russell-Mulgrave, Murray, O'Connell, Pioneer, Plane, Proserpine, Ross, Shoalwater, Styx, Tully and Waterpark catchments, the area of land that supports plants or is associated with plants that are adapted to and dependent on living in wet conditions for at least part of their life cycle and that is—
  - i) shown as a Great Barrier Reef Wetland on the Vegetation Management Wetland Map; or
- b) In all other catchments, the area of land that supports plants or is associated with plants that are adapted to and dependent on living in wet conditions for at least part of their life cycle and that is—
  - i) a regional ecosystem listed in Table 14 and the area on the ground represented as a swamp, lake, marsh, waterhole, wetland, billabong, pool, spring or like, on the most recent 1:250 000 Geoscience Australia topographic map of the area; or
  - ii) a Ramsar wetland.

**Slope** is—

a measure of the upward or downward incline of the land surface over any 30 metre length in the application area.

**Stable soils** are—

those soils listed in Table 13.

**Stream order** is—

a numerical ordering classification of each watercourse segment according to its position within a catchment, as shown in Figure 4. Stream orders are determined using the—

- a) the Vegetation Management Watercourse Map that shows a creek, stream, river or watercourse at a scale of 1:100 000; or
- b) the Vegetation Management Watercourse Map that shows a creek, stream or watercourse at a scale of 1: 250 000 where there is no 1:100 000 map available.

**Unstable soils** are—

those soils listed in Table 13.

**Very unstable soils** are—

those soils listed in Table 13.

**Watercourse** is—

the area of land between the high banks of a natural channel—whether artificially improved or not—in which water flows permanently or intermittently, and that is represented as—

- a) a creek, stream, river or watercourse at a scale of 1:100 000 on the Vegetation Management Watercourse Map; or
- b) a creek, stream, river or watercourse at a scale of 1:250 000 on the Vegetation Management Watercourse Map where there is no 1:100 000 map available.

**Waterlogging** is—

to soak or saturate with water.

**Wetland** is—

the area of land that supports plants or is associated with plants that are adapted to and dependent on living in wet conditions for at least part of their life cycle, and that is—

- a) a regional ecosystem listed in Table 14; or
- b) the area on the ground represented as a swamp, lake, marsh, waterhole, wetland, billabong, pool, spring or like represented on the most recent, finest scale—
  - i. Geoscience Australia topographic map or data that shows swamps, lakes, marshes, waterholes, wetlands, billabongs, pools, springs or like—which can be accessed at the following internet address: <http://www.ga.gov.au/nmd/products>; or
  - ii. topographic data that represents swamps, lakes, marshes, waterholes, wetlands, billabongs, pools, springs or like—which is publicly available from the Department of Environment and Resource Management .
- c) listed as an “active’ spring in the Queensland Springs Database, which can be accessed at the following internet address: <http://www.epa.qld.gov.au/wetlandinfo/site/factsfigures/SummaryInformation/springs.html>

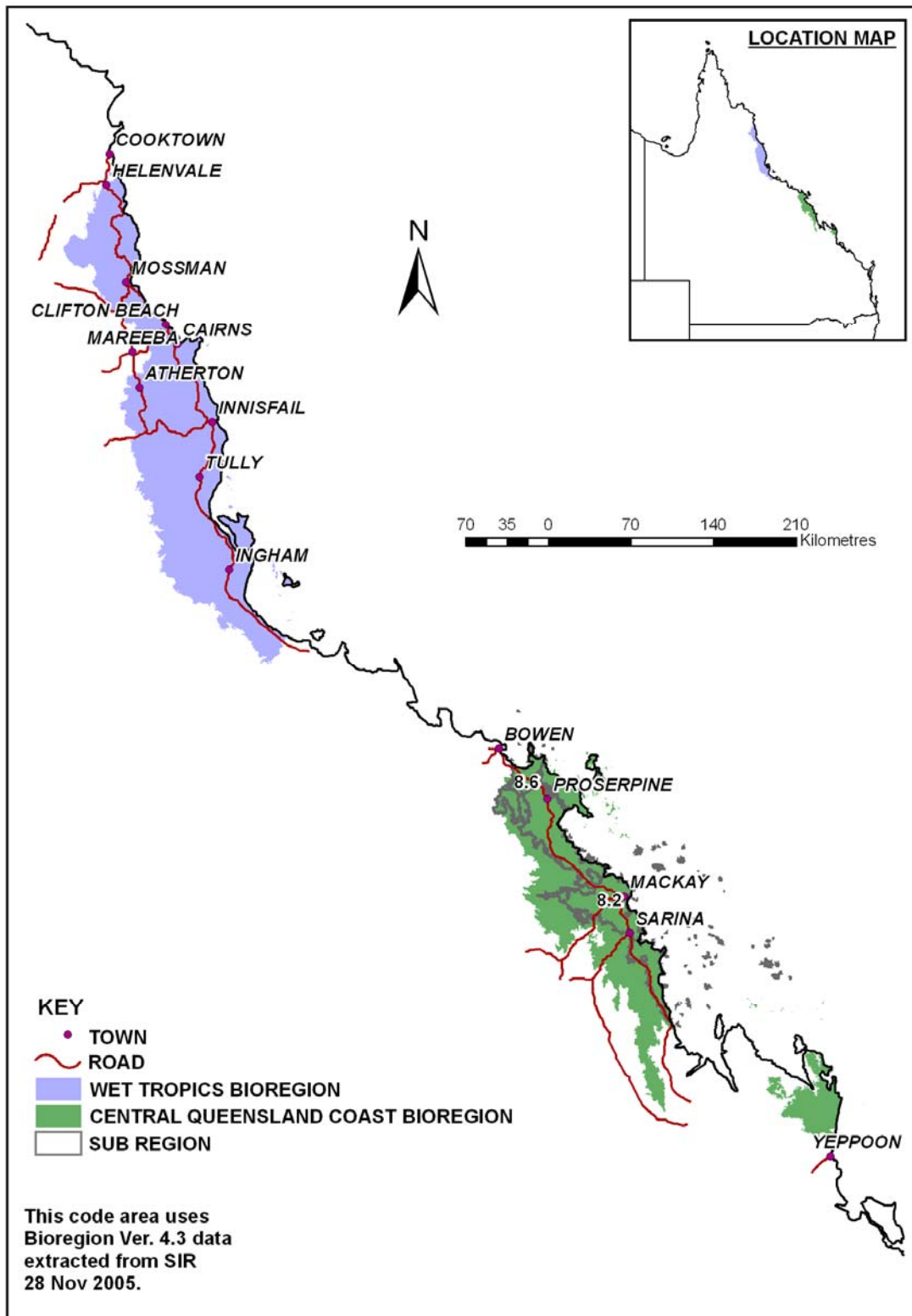
**Wind erosion** is—

the movement of soil by wind.

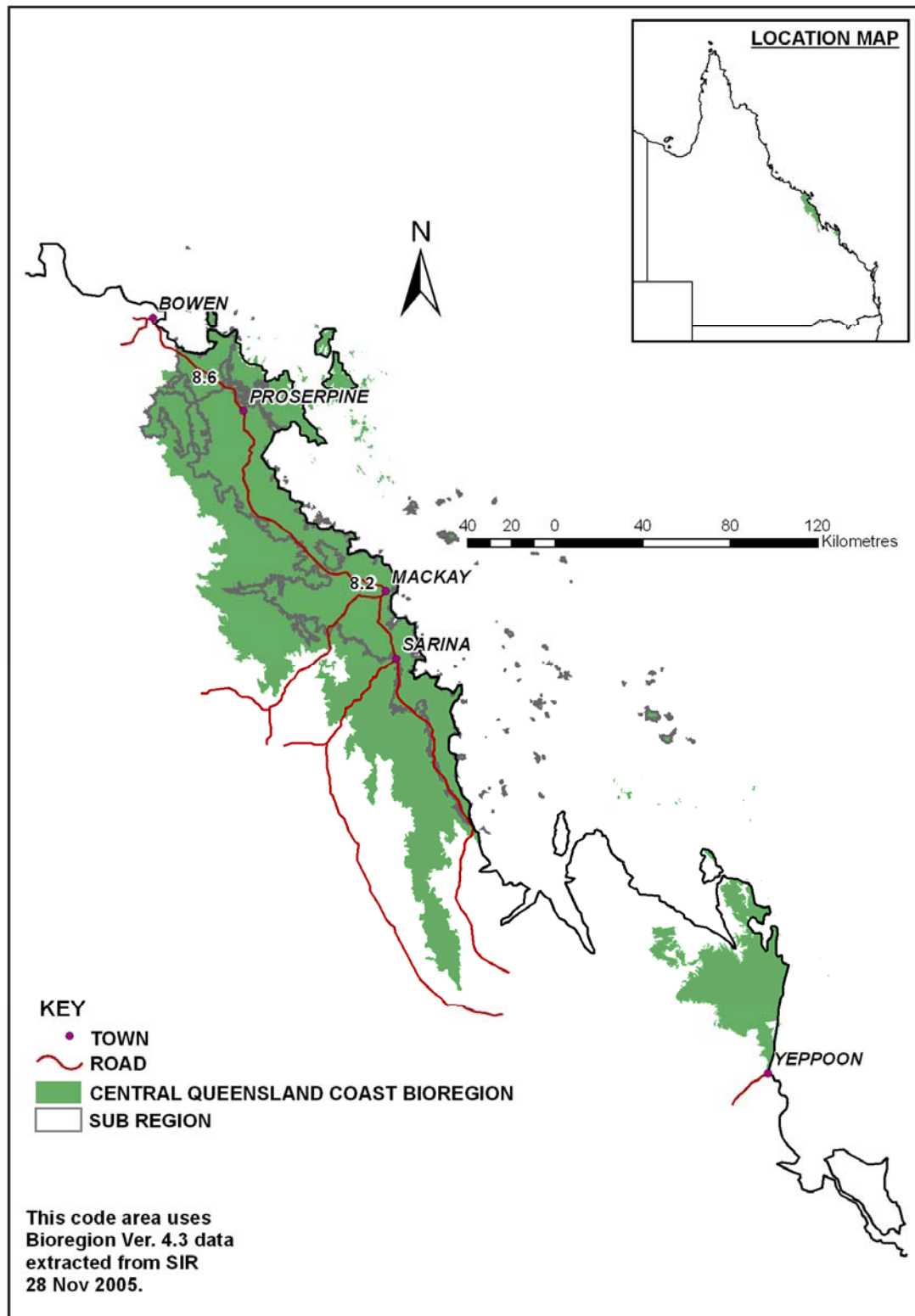
**Woody species crown cover** is—

determined by estimating or measuring the area of ground covered by the canopy of the woody species, ignoring overlap and gaps within individual canopies, and is measured over each 50 metre x 50 metre area.

## Figures

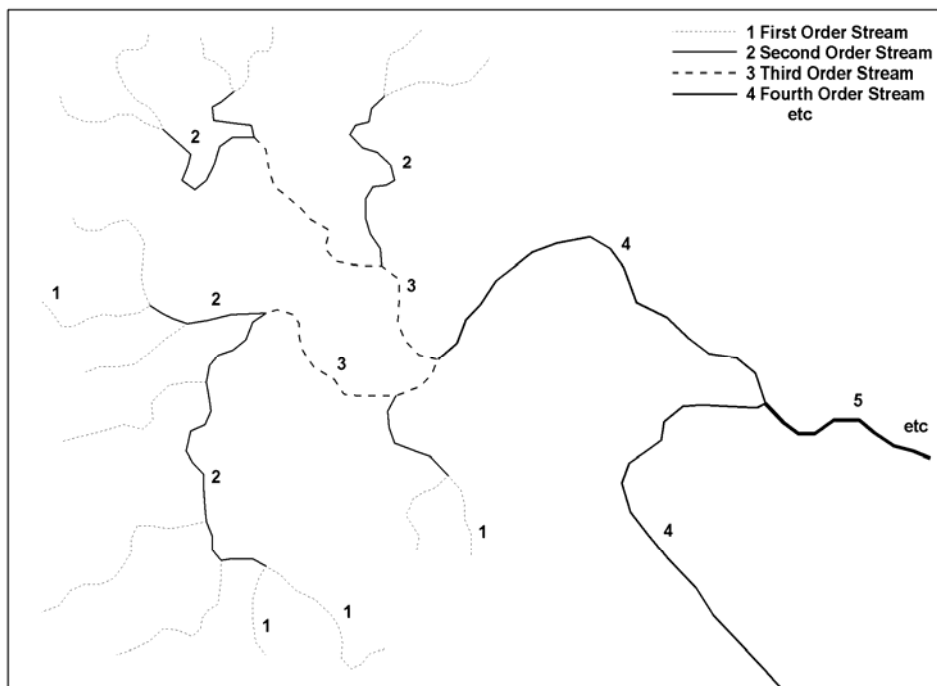


**Figure 2: Location of Wet Tropics and Central Queensland Coast Bioregions**



**Figure 3: Location of subregions 8.2 (Proserpine-Sarina Lowlands) and 8.6 (Debella)**

The exact location of the boundaries of these areas are held in digital electronic form by the Department of Environment and Resource Management, and can be viewed at Environment and Resource Management service centres.



**Figure 4: Diagrammatic view of stream ordering**

When two streams of the same order join, the resulting watercourse becomes one stream order larger. If two streams of different order join, the resultant stream order is that of the larger stream.

## Appendix 1 - Purpose of the Vegetation Management Act 1999

The *Vegetation Management Act 1999* states:

- ‘(1) The purpose of this Act is to regulate the clearing of vegetation in a way that—
- (a) conserves remnant vegetation that is:
    - (i) an *endangered* regional ecosystem; or
    - (ii) an *of concern* regional ecosystem; or
    - (iii) a *least concern* regional ecosystem; and
  - (b) conserves vegetation in declared areas; and
  - (c) ensures the clearing does not cause land degradation; and
  - (d) prevents the loss of biodiversity; and
  - (e) maintains ecological processes; and
  - (f) manages the environmental effects of the clearing to achieve the matters mentioned in paragraphs (a) to (e); and
  - (g) reduces greenhouse gas emissions.
- (2) The purpose is achieved mainly by providing for—
- (a) codes for the Planning Act relating to the clearing of vegetation that are applicable codes for the assessment of vegetation clearing applications under IDAS; and
  - (b) the enforcement of vegetation clearing provisions; and
  - (c) declared areas; and
  - (d) a framework for decision making that, in achieving this Act’s purpose in relation to subsection (1) (a) to (e), applies the precautionary principle that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment if there are threats of serious or irreversible environmental damage; and
  - (e) the phasing out of broadscale clearing of remnant vegetation by 31 December 2006; and
  - (f) the regulation of particular regrowth vegetation
- (3) In this section—
- “environment”** includes—
- (a) ecosystems and their constituent parts including people and communities; and
  - (b) all natural and physical resources; and
  - (c) those qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and
  - (d) the social, economic, aesthetic and cultural conditions affecting the matters in paragraphs (a) to (c) or affected by those matters.’