

BUSH FIRE ENVIRONMENTAL ASSESSMENT CODE

for

New South Wales

February 2006

NSW RURAL FIRE SERVICE

...for our community



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Bush Fire Environmental Assessment Code for New South Wales

Part 1 Preliminary

1.1 Title

This is the *Bush Fire Environmental Assessment Code for New South Wales* (the “Code”).

1.2 Commencement

This Code is to commence on the 1st day of February 2006.

1.3 Dictionary and definitions

Words that are defined in the Dictionary at the end of this Code have the meanings given to them by the Dictionary.

Expressions defined in section 100A of the *Rural Fires Act 1997* also have the meaning so defined.

A definition within the Dictionary of the *Rural Fires Act 1997* applies to this Code, except where defined in the Dictionary at the end of this Code.

1.4 Purpose

The purpose of this Code is to provide a streamlined environmental assessment process for use by issuing authorities and certifying authorities in determining bush fire hazard reduction certificates (“certificates”).

It is a requirement of section 100J of the *Rural Fires Act 1997* that the Commissioner, in preparing this Code, has regard to:

- (a) the principles of ecological sustainable development, and
- (b) considerations under section 111 of the *Environmental Planning & Assessment Act 1979*.

1.5 Authority

This Code has been prepared pursuant to sections 100J to 100N of the *Rural Fires Act 1997*.

1.6 Bush fire hazard reduction certificates by issuing authorities

An issuing authority may issue a certificate under section 100F of the *Rural Fires Act 1997* for bush fire hazard reduction work on private land or any other land not covered by a certifying authority. Local authorities are issuing authorities for certificates. In most cases, local authorities have conferred the function to issue certificates on the Commissioner of the NSW Rural Fire Service under section 12A of the *Rural Fires Act 1997*.

In the case of multiple land tenures for one hazard reduction activity, one certificate can be issued to cover that activity, provided the activity has the written consent of all land owners or occupiers.

1.7 Bush fire hazard reduction certificates by certifying authorities

A certifying authority may issue a certificate under section 100G of the *Rural Fires Act 1997* for bush fire hazard reduction work on land as described in Table 1.1.

Land	Certifying Authority
Any land where the work is directed by the Commissioner of the NSW Rural Fire Service	Commissioner of the NSW Rural Fire Service
Any land that is vested in or under the control of a local authority	The local authority for the area in which the land is situated
Unoccupied Crown land	Department of Lands
Land that is dedicated or reserved, or acquired for the purpose of reservation under the <i>Forestry Act 1916</i>	Forests NSW
Land that is dedicated or reserved, or acquired for the purpose of dedication or reservation under the <i>National Parks and Wildlife Act 1974</i>	Department of Environment and Conservation (Parks and Wildlife Division)
Land that is vested in or under the control of RailCorp	RailCorp
Land that is vested in or under the control of the Rail Infrastructure Corporation	Rail Infrastructure Corporation
Land that is vested in or under the control of the Roads and Traffic Authority	Roads and Traffic Authority
Land that is within the catchment area of a water authority	The water catchment authority of that land

Table 1.1 Land under the control of certifying authorities

1.8 Application for a bush fire hazard reduction certificate

An application for a certificate for work to be carried out on private land, or land not covered by a certifying authority, must be made to the issuing authority in writing in accordance with clause 47 of the *Rural Fires Regulation 2002*. Application forms complying with this are available from the Rural Fire Service.

1.9 Charges

Under section 100F of the *Rural Fires Act 1997* there is no charge for an application for or issue of a certificate.

1.10 Duration of a certificate

Under section 100I of the *Rural Fires Act 1997* a certificate becomes effective and operates for a period of 12 months commencing on the date endorsed on the certificate.

1.11 Refusal to issue and right of appeal

Under section 100F of the *Rural Fires Act 1997* there is no right of appeal against a determination of, or a failure or refusal to determine an application for a certificate. A person may seek approval, consent or other authorisation for bush fire hazard reduction work under relevant environmental legislation, even if an issuing authority has refused or failed to issue a certificate.

1.12 Reporting

Certificates must be recorded within the Bush Fire Risk Information Management System (BRIMS) for the purpose of reporting under section 74 of the *Rural Fires Act 1997*.

The holder of a certificate must advise the issuing authority within 7 days of completing the work specified within the certificate.

1.13 Enforcement

In the event that a person fails to comply with a condition or requirement of a certificate, the work carried out may be subject to enforcement action under the provisions of the environmental legislation offended by the work, as if that certificate had not been issued. That is, legal action is not taken to remedy or restrain a breach of a certificate, but rather the failure to obtain the required consent or approval.

Under section 100H of the *Rural Fires Act 1997* any person may bring proceedings in the Land and Environment Court for an order to remedy or restrain a breach of a Certificate.

1.14 Review

This Code will be reviewed by the Commissioner of the NSW Rural Fire Service within 5 years of operation and amended in accordance with section 100O of the *Rural Fires Act 1997* if required.

1.15 Revocation of Code

The *Bush Fire Environmental Assessment Code for Asset Protection and Strategic Fire Advantage Zones*, July 2003 is revoked.

Part 2 Determination of a Bush Fire Hazard Reduction Certificate

2.1 Process of determination

A certificate must not be issued unless a bush fire risk management plan applies to the land.

2.2 Time to determine an application

Determination of an application for a certificate must be completed within 7 days, or a longer period if agreed to by the applicant, after lodgement of the application, in accordance with clause 1.8.

2.3 Land excluded from the Code

For the purposes of section 100A of the *Rural Fires Act 1997*, the following lands are “excluded lands” and a certificate cannot be issued for work on that land under this Code:

- (a) land to which *State Environmental Planning Policy No 14—Coastal Wetlands* applies,
- (b) land to which *State Environmental Planning Policy No 26—Littoral Rainforests* applies,
- (c) land declared by the Minister for the Environment under section 47 of the *Threatened Species Conservation Act 1995* to be critical habitat,
- (d) land within Lord Howe Island, or
- (e) any other land prescribed by the regulations.

Under section 100C(5) of the *Rural Fires Act 1997*, a certificate cannot be issued on land to which an integrated forestry operations approval within the meaning of the *Forestry and National Park Estate Act 1998* applies.

2.4 Land on which the Code is restricted

A certificate cannot be issued for the following land categories, except where works involve only the manual removal of noxious or environmental weeds (as defined within clause 4.9) in accordance with Part 4:

- (a) the following vegetation formations (as defined in Keith 2004):
 - rainforests,
 - saline wetlands,
 - freshwater wetland classes: montane bogs and fens, coastal freshwater lagoons, montane lakes,
 - alpine complex,
- (b) wetlands of international significance under the RAMSAR Convention,
- (c) a wilderness area within the meaning of the *Wilderness Act 1987*, or
- (d) coastal dune vegetation within 100 metres of the mean high water mark.

2.5 Activities to which the Code does not apply

A certificate cannot be issued for the following activities:

- (a) the construction and/or maintenance of a track, trail or road,
- (b) agricultural activities that do not have an existing requirement for environmental assessment, such as stubble burning, burning of sugar cane and diseased crops,
- (c) vegetation clearing other than for bush fire hazard reduction work,
- (d) burning of:
 - green garden waste,
 - construction and industrial waste, or
 - other rubbish,
- (e) burning of windrows resulting from any purpose (e.g. clearing for development or agriculture) other than plantation operations as per clause 3.3.1 and 3.4.1,
- (f) burning for bush regeneration or ecological purposes.

2.6 Existing land management agreements

If any of the following land management agreements have been entered into, the conditions on the certificate must not be inconsistent with that agreement:

- (a) any conservation agreement entered into under Division 12 of Part 4 of the *National Parks and Wildlife Act 1974*,
- (b) any property agreement entered into under Part 5 of the *Native Vegetation Conservation Act 1997*,
- (c) any Trust Agreement entered into under Part 3 of the *Nature Conservation Trust Act 2001*,
- (d) any property management plan approved by the Director-General of National Parks and Wildlife under section 91 of the *Threatened Species Conservation Act 1995*, or
- (e) any Property Vegetation Plan agreement entered into under Part 4 of the *Native Vegetation Act 2003*.

2.7 Previous development consents and approvals

If a development consent under the *Environmental Planning & Assessment Act 1979* has been granted for the land on which the work is proposed and the consent allows for the provision of an asset protection zone or other bush fire protection measure and the proposed work is in accordance with the consent, a certificate is not required.

A certificate must not be inconsistent with the provisions of any current development consent. In particular, a certificate must not allow damage to vegetation contrary to the conditions of a consent.

A certificate must not be inconsistent with a permit issued under Part 3A of the *Rivers and Foreshores Improvement Act 1948* or an authorisation under the *Plantations and Reafforestation Act 1999*.

2.8 Owners consent to undertake bush fire hazard reduction work

Under section 100F of the *Rural Fires Act 1997*, any application to an issuing authority for a certificate must include the written consent of all owners or occupiers of the land upon which the work is proposed to be undertaken.

Part 3 Type of Hazard Reduction

3.1 Purpose of works

The work must be for the purpose of bush fire hazard reduction. This Code only covers work as defined in clauses 3.2, 3.3 and 3.4.

The work must be carried out in accordance with a bush fire risk management plan that applies to the land.

3.2 Asset Protection Zones (APZ)

Asset Protection Zones provide fuel reduced areas around assets or groups of assets which are adjacent to bush fire hazards. APZs generally contain highly modified vegetation to reduce the radiant heat impact during a fire, and provide a defensible space to allow residents and fire fighters to operate after the passage of the fire front.

An APZ alone may not provide complete protection, and should be accompanied by appropriate building construction and maintenance, and may also be complemented with a strategic fire advantage zone.

This Code covers Asset Protection Zones for:

- residential buildings,
- special fire protection buildings (as defined in section 100B of the *Rural Fires Act 1997*; e.g. schools, hospitals, retirement villages),
- major buildings (such as communication towers, farm sheds, hay sheds, machinery sheds, industrial buildings, commercial buildings),
- plantations, and
- boundary fences (being a fence erected on the boundary separating land owned by different persons/agencies).

The area and extent of work permissible for an APZ must be described as a condition within the certificate, or a map defining the boundaries and extent of work permissible for an APZ must be attached to the certificate.

3.2.1 Maximum extent of work permissible within an APZ

3.2.1.1 Residential and special fire protection buildings

The maximum extent of work for residential and special fire protection buildings must be no greater than the distances specified in Table 3.1.

All distances are measured in the horizontal plane from the edge of the building.

Slope	Distance
Hazard upslope	20 metres
Hazard downslope <10°	20 metres
Hazard downslope 10°-15°	30 metres
Hazard downslope >15°	40 metres

Table 3.1 Maximum APZ widths for residential and special fire protection buildings

3.2.1.2 Major buildings

The maximum extent of work for major buildings must be no greater than 20 metres, as measured in the horizontal plane from the edge of the building.

3.2.1.3 Boundary fences

The maximum width of work along a boundary fence must be no greater than 6 metres on each side of the fence. Work must not involve the removal of native vegetation older than 10 years.

3.2.1.4 Plantations

Work is only permissible within the boundaries of the plantation or for the maintenance of existing slashed breaks. The maximum extent of work for plantations must be no greater than 30 metres. Work must not involve the mechanical removal of native vegetation that has been retained to be managed for biodiversity outcomes as part of a plantation authorisation under Division 6 of the *Plantations and Reafforestation (Code) Regulation 2001*.

3.2.2 Work permissible within an APZ

Only the following works are permissible within an APZ:

- (a) Mechanical work for the maintenance or establishment of APZs in accordance with the requirements of Part 4.
- (b) Pruning and tree removal in accordance with the requirements of Part 4.
- (c) Prescribed burning in accordance with the requirements of Part 5.
- (d) Construction of control lines in accordance with the requirements of Part 5.
- (e) Pile burning for disposal of vegetation material removed during APZ or SFAZ works, only where the material in the pile cannot be disposed of by the normal garbage collection or be composted on site. Evidence of approval (a certificate or any approval, consent or authorisation otherwise required) for the collection of the material forming the pile must be presented before a certificate can be issued to burn a pile. Works must be assessed in accordance with the requirements of clauses 5.1, 5.2, 5.4, 5.6, 5.7, 5.8 and 5.9.

3.3 Strategic Fire Advantage Zones (SFAZ)

Strategic Fire Advantage Zones are land that is mapped or described as such in a bush fire risk management plan.

Where a plantation is identified within a bush fire risk management plan, and a SFAZ is described in the text of the plan, SFAZ works by low intensity prescribed burning are permissible up to the first natural/existing containment line within 1000 metres of the boundary of the plantation.

A SFAZ is intended:

- to provide fuel reduced areas which enable the protection of assets by firefighters when asset protection zones are not in place,
- to complement asset protection zones where these do not provide adequate protection,
- to provide strategically located fuel reduced areas to reduce the potential for large wildfires to develop,
- to provide areas where fire can more easily be suppressed, or
- to provide strategically located fuel reduced areas to reduce vulnerability of assets which are susceptible to fire.

A map defining the boundaries and extent of permissible work for a SFAZ must be attached to the certificate.

3.3.1 Work permissible within a SFAZ

Only the following works are permissible within a SFAZ:

- (a) Mechanical work along existing linear fire breaks that are identified in a bush fire risk management plan, or up to a maximum of 6 metres from boundary fences. Works must not involve the removal of native vegetation older than 10 years. Works must be assessed in accordance with the requirements of Part 4.
- (b) Prescribed burning in accordance with the requirements of Part 5.
- (c) Construction of control lines in accordance with the requirements of Part 5.
- (d) Pile burning for disposal of vegetation material removed during APZ or SFAZ works, only where the material in the pile cannot be disposed of by the normal garbage collection or be composted on site. Evidence of approval (a certificate or any approval, consent or authorisation otherwise required) for the collection of the material forming the pile must be presented before a certificate can be issued to burn a pile. Works must be assessed in accordance with the requirements of clauses 5.1, 5.2, 5.4, 5.6, 5.7, 5.8 and 5.9.
- (e) Windrow burning for disposal of windrows created as part of plantation operations (as defined in the *Plantations and Reafforestation Act 1999*). Evidence of approval to create the windrow must be presented before a certificate can be issued to burn a windrow. Works must be assessed in accordance with the requirements of Part 5.

3.4 Land Management Zones (LMZ)

Land Management Zones are land that is mapped or described as such in a bush fire risk management plan.

Hazard reduction in a LMZ should aim to achieve fire protection objectives by providing a mosaic of areas with varying fuel load structures within the landscape. A mosaic pattern provides areas of lower fuel loads where suppression efforts are safer and have a greater chance of success. LMZs should be managed so as to provide optimum fire frequencies required for the maintenance of biodiversity.

A map defining the boundaries and extent of permissible work for a LMZ must be attached to the certificate.

3.4.1 Work permissible within a LMZ

Only the following works are permissible within a LMZ:

- (a) Prescribed burning in accordance with the requirements of Part 5.
- (b) Construction of control lines in accordance with the requirements of Part 5.
- (c) Windrow burning for disposal of windrows created as part of plantation operations (as defined in the *Plantations and Reafforestation Act 1999*). Evidence of approval to create the windrow must be presented before a certificate can be issued to burn a windrow. Works must be assessed in accordance with the requirements of Part 5.

Part 4 Mechanical Hazard Reduction

4.1 Land to which mechanical works do not apply

A certificate can not be issued for mechanical works (other than hand tool control lines) in land supporting isolated areas of vegetation including:

- (a) any isolated area of vegetation less than 1 hectare in size that is separated from any other area of vegetation larger than one hectare by a distance of at least 100 metres, or
- (b) strips of vegetation less than 20 metres wide associated with a linear feature such as a road, rail, river or stream corridor.

4.2 Standards to prevent soil erosion and instability

Mechanical works that result in an exposed soil surface render the ground vulnerable to erosion. To minimise soil erosion, at least 75% ground cover should be retained as described in the RFS document *Standards for Asset Protection Zones*. In areas to be maintained permanently as APZs, a suitable groundcover (e.g. short grass cover) is to be established.

4.2.1 Standards for soil erosion and instability where maps of Soil Erosion Risk are available

A certificate may only be issued where works are consistent with the requirements of the relevant mapped Soil Erosion Risk classification as specified in Tables 4.1 and 4.2.

Where land is mapped as susceptible to mass movement, works must be consistent with the relevant conditions specified in Tables 4.1 and 4.2.

Soil Erosion Risk (tonnes/ha/yr)	Use of hand tools and hand held machinery	Use of slashing machinery	Use of graders, ploughs and dozers Note that slashing is preferred	Removal and pruning of trees
0-40	Permitted	Permitted	All topsoil must remain on the soil surface	Permitted
40-80	Permitted	Permitted	All topsoil must remain on the soil surface Where possible, machinery work must be conducted parallel to contours	Permitted
80-150	Permitted	Vegetation must not be slashed below 5 cm Retain slashed vegetation to ensure that at least 90% ground cover is maintained	Not permitted	Root structure of removed trees must be left undisturbed
150-220	Permitted	Vegetation must not be slashed below 10 cm Retain slashed vegetation to ensure that at least 90% ground cover is maintained	Not permitted	Only pruning of trees permissible, 75% of original canopy cover must be retained
Over 220 or land mapped as susceptible to mass movement	Permitted	Not permitted	Not permitted	Only pruning of trees permissible, 75% of original canopy cover must be retained

Table 4.1 Works permissible within APZs

Soil Erosion Risk (tonnes/ha/yr)	Use of hand tools and hand held machinery	Use of slashing machinery	Use of graders, ploughs and dozers
0-40	Permitted	Permitted	All topsoil must remain on the soil surface
40-80	Permitted	Vegetation must not be slashed below 5 cm	All topsoil must remain on the soil surface Where possible, machinery work must be conducted parallel to contours There must be a time interval of 2 years between successive work
80-150	Permitted	Vegetation must not be slashed below 5 cm Retain slashed vegetation to ensure that at least 90% ground cover is maintained	Not permitted
150-220	Permitted	Vegetation must not be slashed below 10 cm Retain slashed vegetation to ensure that at least 90% ground cover is maintained	Not permitted
Over 220 or land mapped as susceptible to mass movement	Permitted	Not permitted	Not permitted

Table 4.2 Works permissible within SFAZs

4.2.2 Standards for soil erosion and instability where maps of Soil Erosion Risk are not available

4.2.2.1 Use of hand tools and hand held machinery

- Permissible on all slopes.

4.2.2.2 Use of slashing machinery

- Not permitted on slopes greater than 18°.
- On slopes greater than 10° slashing must not leave vegetation shorter than 10 cm from the ground surface.

Note: the operation of machinery on slopes greater than 15° may be unsafe.

4.2.2.3 Use of graders, ploughs and dozers

- Not permitted on slopes greater than 10°.
- Machinery work must not reshape the soil surface or result in re-direction of surface water runoff.
- All topsoil must remain on the soil surface.
- Machinery work should be conducted parallel to contours.

4.2.2.4 Tree removal and pruning

- Only permitted within APZs.
- Where trees are removed on slopes greater than 10°, the root structure must be left undisturbed.
- Tree removal is not permitted on slopes greater than 18°.
- Pruning is only permitted on slopes greater than 18° if at least 75% of the original canopy cover is retained.

4.3 Standards for the protection of riparian buffers

Mechanical work must be excluded from all vegetation adjacent to a water body (i.e. the riparian buffer zone) within the distances specified in Tables 4.3 and 4.4. The distance (metres) is measured from the highest bank or shore (or mean high water for tidal waters) on either side of the water body.

The riparian buffer zones do not apply to APZ works within the following vegetation classes of Keith (2004): coastal heath swamps, coastal swamp forests and coastal floodplain wetlands.

Water body	Use of hand tools and hand held machinery	Use of slashing machinery	Use of graders, ploughs and dozers	Removal of trees
1 st Order and unmapped streams	5	5	10	5
2 nd Order Streams; Wetlands, Lakes and Lagoons greater than or equal to 0.1 ha but less than 0.5 ha	5	10	15	10
3 rd Order Streams; Wetlands, Lakes and Lagoons greater than or equal to 0.5 ha but less than 2 ha	10	15	20	15
4 th Order Streams & greater; Estuaries; Wetlands, Lakes and Lagoons greater than or equal to 2 ha	10	20	20	20

Table 4.3 Riparian buffer zones for APZs (metres)

Water body	Use of hand tools and hand held machinery	Use of slashing machinery	Use of graders, ploughs and dozers
1 st Order and unmapped streams	5	5	10
2 nd Order Streams; Wetlands, Lakes and Lagoons greater than or equal to 0.1 ha but less than 0.5 ha	5	10	20
3 rd Order Streams; Wetlands, Lakes and Lagoons greater than or equal to 0.5 ha but less than 2 ha	10	15	30
4 th Order Streams and greater; Estuaries; Wetlands, Lakes and Lagoons greater than or equal to 2 ha	15	20	40

Table 4.4 Riparian buffer zones for SFAZs (metres)

4.4 Standards for the protection of native vegetation

The following criteria apply to tree removal/pruning works for the creation and/or maintenance of an APZ:

- Any part of a tree within 5 metres of the building may be removed (this may involve pruning of the tree, rather than total removal).
- The canopy throughout the APZ should be discontinuous. Tree crowns may be separated by a maximum of 5 metres (this may involve pruning of trees, rather than total removal).
- Skirting (the removal of lower branches) to separate the tree canopy from the ground or understorey vegetation should be used in preference to tree removal where appropriate.
- Any pruning or branch removal must be carried out in accordance with the Rural Fires Service *Standards for Asset Protection Zones* or AS 4373—1996 *Pruning of amenity trees*.

In selecting trees for removal:

- Species that are listed by the local authority as noxious or environmental weeds should be removed in preference to other species.
- Non-native woody plants should be removed in preference to native species.
- Species with rough, flaky or stringy bark should be removed in preference to those with smooth or tightly held bark.
- Small trees without hollows should be removed in preference to larger trees and trees with hollows.
- Locally common species should be removed in preference to species listed by the local authority as regionally significant, or valuable for habitat or food source.
- Trees that have been determined to be dangerous by the local authority should be removed in preference to other trees.

4.5 Standards for the protection of biodiversity

4.5.1 Determining presence of threatened species, populations or ecological communities

The Threatened Species Hazard Reduction Map must be used to determine if threatened species, populations or ecological communities are present at the site. In addition, a certifying authority must determine the likely presence or otherwise of any threatened species, populations or ecological communities from such data, reports or papers available to the certifying authority.

4.5.2 Determining management conditions from the Threatened Species Hazard Reduction List

Where threatened species, populations or ecological communities are identified by the Threatened Species Hazard Reduction Map (and by other means in the case of certifying authorities) as present at the site, then the management actions identified within the Threatened Species Hazard Reduction List must be imposed as a condition of the certificate.

4.5.3 Modifying management conditions from the Threatened Species Hazard Reduction List

4.5.3.1 Modifying management conditions for issuing authorities

Where conditions on the Threatened Species Hazard Reduction List would prevent the works, an issuing authority may proceed to assess the certificate if a licence under Section 91 (or a certificate under Section 95(2)) of the *Threatened Species Conservation Act 1995* has been issued by DEC. The conditions in the s91 licence (or s95(2) certificate) must be imposed.

4.5.3.2 Modifying management conditions for certifying authorities

Where conditions on the Threatened Species Hazard Reduction List would prevent the works, a certifying authority may proceed to assess the certificate in the following circumstances:

- (a) If a site inspection (under the DEC *Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities*) indicates that the species, population or ecological community of concern, or their habitat, is not likely to occur at the site, or
- (b) If a site assessment/inspection (under the DEC *Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities*) indicates that the location of the species, population or ecological community of concern or their habitat is such that the conditions can be modified to protect the species. The principles of making such a modification to the conditions are detailed in the explanatory notes of the Threatened Species Hazard Reduction List and must be followed, or
- (c) If a licence under Section 91 (or a certificate under Section 95(2)) of the *Threatened Species Conservation Act 1995* has been issued by DEC. The conditions in the s91 licence (or s95(2) certificate) must be imposed.

4.6 Standards for the protection of Aboriginal heritage

4.6.1 Determining presence of Aboriginal heritage sites

4.6.1.1 Determining presence for issuing authorities

The issuing authority must refer the application to the DEC (Cultural Heritage Division) in the following circumstances:

- slashing areas not previously subject to slashing, trittering, removal of many trees, or earthworks,
- trittering areas not previously subject to trittering, significant tree removal, or earthworks, or
- removal of trees greater than 100 cm diameter at breast height.

The issuing authority must provide the DEC with a full copy of the applicant's application for a certificate, and any other relevant information held by the issuing authority necessary to ascertain the location of the proposed hazard reduction work (e.g. maps).

The DEC will provide information within 3 working days, detailing any Aboriginal sites of concern. The 3 working day turn around does not commence until receipt of the documents (as specified above) by the DEC. If the DEC does not meet the 3 working day turn around then the issuing authority may proceed to issue the certificate.

4.6.1.2 Determining presence for certifying authorities

Certifying authorities that do not have a data licence agreement must refer the proposal details to the DEC (Cultural Heritage Division) in the circumstances described in 4.6.1.1.

The DEC will provide information within 3 working days, detailing any Aboriginal sites of concern. The 3 working day turn around does not commence until receipt of the documents by the DEC. If the DEC does not meet the 3 working day turn around then the certifying authority must consult with DEC before proceeding with the certificate.

Certifying authorities that have a data licence agreement in place with the DEC are not required to refer to the DEC (for the areas subject to the licence agreement).

4.6.2 Determining management conditions for Aboriginal heritage

Where Aboriginal heritage sites are indicated to be present, then hazard reduction works must be undertaken in accordance with the relevant conditions specified in the RFS/DEC document *Conditions for Hazard Reduction and Aboriginal Heritage*.

4.7 Standards for the protection of other cultural heritage

If there is a site on the national, state or local heritage register that may be affected by the proposed work, conditions must be imposed to protect the site. Such conditions must be consistent with the RFS/NSW Heritage Office document *Guidelines for Bush Fire Hazard Reduction Works Affecting Heritage Items*.

4.8 Standards for the protection of significant environmental protection areas

If there are any environmental protection areas zoned within the local environmental plan (LEP) or plan of management relevant to the area of proposed work, conditions must be imposed to ensure the works are consistent with the objectives of the zone/plan to protect the environmental values of the area.

4.9 Standards relating to weeds

If there are species listed by the local authority as noxious or environmental weeds within the area where work is proposed, conditions must be imposed to prevent the spread of weeds.

Herbicides can only be used within this Code for removing weeds.

Herbicides cannot be used within 100 metres of the known location of any species listed in the Threatened Species Hazard Reduction List, unless the List states otherwise. The use of herbicides near water bodies must not be undertaken if likely to result in water pollution

Where herbicides are to be used, conditions must be imposed that the user is required to:

- use only herbicides registered by the Australian Pesticides and Veterinary Medicines Authority (www.apvma.gov.au) that are approved for the intended situation of use,
- strictly adhere to any directions on the label,
- operate in accordance with Weed CRCs Best Practices Management Guidelines,
- not risk injury to persons, property and non-target plants and animals through the use of a herbicide,
- use in accordance with the requirements of the *Pesticides Act 1999*, and the *Protection of Environment (Operations) Act 1997*, and
- operate in accordance with the *Noxious Weeds Act 1993*.

Part 5 Hazard Reduction using Prescribed Burning

5.1 Land to which burning does not apply

A certificate cannot be issued for prescribed burning (including burning of piles and windrows) on:

- (a) land that contains peat soils, or
- (b) land that is mapped or described as a fire exclusion zone in a bush fire risk management plan.

5.2 Type of burn

- A certificate cannot be issued for high intensity prescribed burning in forest, woodland or wetland vegetation formations (as defined in Keith 2004).
- A certificate cannot be issued for moderate or high intensity prescribed burning in land supporting isolated areas (as defined in clause 4.1) of forest, woodland or wetland vegetation formations.
- Low intensity prescribed burning must be conducted in accordance with the NSW Rural Fire Service *Standards for Low Intensity Bush Fire Hazard Reduction Burning*.
- All prescribed burning in grasslands must be conducted in accordance with the NSW Rural Fire Service *Standards for Low Intensity Bush Fire Hazard Reduction Burning*.
- Moderate intensity prescribed burning must be conducted with a fire fighting agency in attendance and in accordance with an agency approved burn plan (except in grassland).
- High intensity prescribed burning (in heathland or shrubland vegetation formations of Keith 2004) must be conducted with a fire fighting agency in attendance and in accordance with an agency approved burn plan.
- Pile burning must be conducted in accordance with the NSW Rural Fire Service *Standards for Pile Burning*.
- Windrow burning must be conducted in accordance with the requirements of the *Plantations and Reafforestation (Code) Regulation 2001* and the NSW Rural Fire Service *Standards for Windrow Burning*.

5.3 Construction of control lines

Prescribed burns must be contained within planned control lines. The closest natural/existing containment lines to the intended perimeter of the burn should be used where available. Construction of additional control lines must be limited to the minimum extent necessary to carry out the burn safely. The width of a control line must not exceed 4 metres.

Construction of control lines is only permitted where works are consistent with the requirements of the relevant mapped Soil Erosion Risk as specified in Table 5.1. Where maps of Soil Erosion Risk are not available works must be consistent with the requirements of clause 4.2.2.

Where land is mapped as susceptible to mass movement, works must be consistent with the relevant conditions specified in Table 5.1.

Soil Erosion Risk (tonnes/ha/yr)	Use of hand tools and hand held machinery	Use of slashing machinery	Use of graders, ploughs and dozers	Tree removal
0-40	Permitted	Permitted	Permitted in APZ and SFAZ only	Permitted in APZ only
40-80	Permitted	Permitted in SFAZ and APZ only	Permitted in APZ only	Permitted in APZ only
80-150	Permitted	Permitted in APZ only	Not permitted	Not permitted
150-220	Permitted	Not permitted	Not permitted	Not permitted
Over 220 or land mapped as susceptible to mass movement	Permitted	Not permitted	Not permitted	Not permitted

Table 5.1 Conditions for control line construction where Soil Erosion Risk maps are available

Control lines must be constructed in a manner that minimises the potential for soil erosion. Control lines should be constructed where native vegetation has already been disturbed, in preference to undisturbed vegetation. Conditions must be imposed that control lines constructed through native vegetation in SFAZs and LMZs must be allowed to regenerate following the burn.

Control lines that run parallel to a water body must not be constructed within the riparian buffer distances specified in Table 4.3. Control lines may be constructed within riparian buffers where they are constructed perpendicular to a stream. Drainage structures must be constructed between 5 and 20 metres of the highest bank of the stream.

Drainage structures (such as crossbanks and culverts) must be constructed at 50 metre intervals under the following circumstances:

- (a) where the Soil Erosion Risk is greater than 80 (t/ha/yr) (or slope greater than 18° where soil erosion risk maps are not available), and
- (b) the control line will be perpendicular to the contour, and
- (c) the control line will be greater than 1 metre wide.

Construction of drainage structures must be conducted in accordance with the NSW Rural Fire Service *Standards for Low Intensity Bush Fire Hazard Reduction Burning*.

5.4 Standards for the protection of biodiversity – threatened species

5.4.1 Determining presence of threatened species, populations or ecological communities

The Threatened Species Hazard Reduction Map must be used to determine if threatened species, populations or ecological communities are present at the site. In addition, a certifying authority must determine the likely presence or otherwise of any threatened species, populations or ecological communities from such data, reports or papers available to the certifying authority.

5.4.2 Determining management conditions from the Threatened Species Hazard Reduction List

Where threatened species, populations or ecological communities are identified by the Threatened Species Hazard Reduction Map (and by other means in the case of certifying authorities) as present at the site, then the management actions identified within the Threatened Species Hazard Reduction List must be imposed as a condition of the certificate.

5.4.3 Modifying management conditions from the Threatened Species Hazard Reduction List

5.4.3.1 Modifying management conditions for issuing authorities

Where conditions on the Threatened Species Hazard Reduction List would prevent the works, an issuing authority may proceed to assess the certificate if a licence under Section 91 (or a certificate under Section 95(2)) of the *Threatened Species Conservation Act 1995* has been issued by DEC. The conditions in the s91 licence (or s95(2) certificate) must be imposed.

5.4.3.2 Modifying management conditions for certifying authorities

Where conditions on the Threatened Species Hazard Reduction List would prevent the works, a certifying authority may proceed to assess the certificate in the following circumstances:

- (a) If a site inspection (under the DEC *Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities*) indicates that the species, population or ecological community of concern, or their habitat, is not likely to occur at the site, or
- (b) If a site assessment/inspection (under the DEC *Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities*) indicates that the location of the species, population or ecological community of concern or their habitat is such that the conditions can be modified to protect the species. The principles of making such a modification to the conditions are detailed in the explanatory notes of the Threatened Species Hazard Reduction List and must be followed, or
- (c) If a licence under Section 91 (or a certificate under Section 95(2)) of the *Threatened Species Conservation Act 1995* has been issued by DEC. The conditions in the s91 licence (or s95(2) certificate) must be imposed.

5.5 Standards for the protection of biodiversity – fire regimes and fire interval thresholds

The issuing/certifying authority must determine the primary vegetation formation to be burned within the gross area proposed for hazard reduction burning, and apply the appropriate minimum fire interval. In situations where other vegetation formations occur as a significant proportion within the primary vegetation, then the appropriate fire interval must be addressed for these vegetation formations as well. The issuing/certifying authority must also consider sensitive vegetation communities (e.g. rainforest or wet sclerophyll forest gullies) and impose a condition on the certificate to ensure that the potential for burning these areas is minimised through appropriate implementation of the burn.

The issuing/certifying authority must determine the fire history of the site of proposed works from all records available to the issuing/certifying authority. Where no fire history is recorded for the site, the time since fire of the proposed burn area must be determined by a site inspection.

Where a burn for which a certificate has been issued is carried out but does not achieve the objectives of the burn, a further burn may be carried out within the terms of the certificate for any area that was identified within the certificate in order to achieve those objectives.

5.5.1 Fire interval thresholds from the Threatened Species Hazard Reduction List

If threatened species, populations or ecological communities were identified as present at the site in clause 5.4.1, a certificate may only be issued for prescribed burning in any management zone if the time since fire is longer than, or equal to, the fire interval required by the Threatened Species Hazard Reduction List (if specified).

5.5.2 Fire interval thresholds for APZs

A certificate may be issued for prescribed burning in an APZ regardless of fire interval, unless threatened species, populations or ecological communities are identified, as per clause 5.5.1.

5.5.3 Fire interval thresholds for SFAZs

A certificate may only be issued for prescribed burning in a SFAZ if the time since fire is longer than, or equal to, the minimum fire interval in the bush fire risk management plan. If the minimum fire interval requirements are not defined or adequately mapped in the bush fire risk management plan, a certificate may be issued if the time since fire is longer than, or equal to, the minimum fire interval for SFAZ in Appendix A.

5.5.4 Fire regime requirements for LMZs

If the minimum fire interval requirements are described within the bush fire risk management plan for land management zones, these are to be used in clauses 5.5.4.1 and 5.5.4.2. If the minimum fire interval requirements are not defined or adequately mapped in the bush fire risk management plan, the minimum fire intervals for LMZ in Appendix A are to be used in clauses 5.5.4.1 and 5.5.4.2.

5.5.4.1 Fire interval thresholds for LMZs

A certificate may only be issued for prescribed burning in a LMZ if either of the two conditions below can be met:

- (a) i The time since fire must be longer than, or equal to, the minimum fire interval for LMZ, and
- ii If the recorded fire history for the burn area includes more than the most recent fire then:
 - The time between the most recent fire and the fire preceding this must be longer than, or equal to, the minimum fire interval, or
 - If the time between the most recent fire and the fire preceding this was shorter than the minimum fire interval requirements, then the time since fire must be longer than, or equal to, the minimum fire interval multiplied by 1.5.
- (b) If the time since fire is less than the minimum fire interval for LMZ but longer than, or equal to, the minimum fire interval for SFAZ, then the time between the most recent fire and the fire preceding this must be recorded and be longer than, or equal to, the minimum fire interval for LMZ.

5.5.4.2 Landscape consideration of fire regime for LMZs

A certificate may only be issued for prescribed burning in a LMZ if:

- (a) within the area covered by the bush fire risk management plan, less than 50% of the dominant vegetation formation of the proposed burn area has been burnt within the last 24 months,
- (b) within a vegetation community identified as regionally significant, part of the community is to remain at a time since fire of at least equal to the minimum fire interval for LMZ,
- (c) within a known wildlife corridor, part of the area is to remain at a time since fire of at least equal to the minimum fire interval for LMZ, and
- (d) the landscape is being managed to maintain a mosaic of varying age structures.

5.6 Fire permits

The person acting on a certificate must ascertain whether at the proposed time of the burn a fire permit is required under section 87 or section 88 of the *Rural Fires Act 1997*. If a fire permit is required, this must be obtained prior to conducting the burn.

5.7 Notification of fire fighting authorities

The person acting on a certificate must give at least 24 hours notice prior to lighting the burn as follows:

- in a Rural Fire District, to the fire control officer,
- in a NSW Fire Brigade District, to the officer in charge of the fire station nearest the land on which the burn is to be conducted.

5.8 No Burn days

On making notification in clause 5.7, the person must ascertain from the local fire control officer or officer in charge of the nearest NSW Fire Brigade station whether:

- a No Burn Notice has been or is likely to be issued by the DEC, and
- if the proposed activity qualifies for an exemption from the No Burn Notice.

5.9 Standards relating to the effects of smoke

For the purpose of this Code:

- small fires are prescribed burns up to 1 hectare in size and pile burns
- large fires are prescribed burns greater than 1 hectare in size and windrow burns

5.9.1 Adjoining land and neighbouring residences

Conditions must be imposed that at least 24 hours notification of the intended date of the burn must be given to all adjoining landholders and:

- for a small fire, the owners/occupiers of any residential premises within 50 metres.
- for a large fire, the owners/occupiers of any residential premises within 200 metres.

5.9.2 Sensitive locations

Sensitive locations include schools, hospitals, residential aged care facilities, ventilation intakes (e.g. mine shafts), airports and the like.

If any of these locations are within 100 metres of a small fire or 1000 metres of a large fire, conditions must be imposed that:

- the owner/manager must be given at least 7 days notification of the intended date of the burn, and
- burning is to be carried out only when the facility is closed or not operating, or the prevailing or forecast weather patterns indicate that the wind will be blowing away from it.

Where circumstances warrant, for example local topography channels smoke, the distances specified above should be increased.

Consideration should be given to whether burning should be restricted to daylight hours.

5.9.3 Traffic

Where smoke has the potential to detrimentally affect traffic, conditions must be imposed requiring that the person acting on the certificate must:

- at least 2 weeks prior to the planned burn, liaise with police and the relevant road authority (RTA or Local Council) to determine when traffic conditions are likely to be most suitable to carry out the burn and any requirements for road safety and traffic management including public communications, signage, constraints on ingress and egress from the road carriageway,
- comply with any requirements so specified, unless those requirements are contrary to any other condition of the certificate, in which case the work cannot be conducted, and
- notify the relevant road authority (RTA or Local Council) 24 hours before the proposed burn if the conditions are such that the smoke will affect a nearby road.

5.9.4 Tourism

If tourism is significant in the area and identified in the bush fire risk management plan, conditions may be applied to the certificate to ensure that the planned timing of the burn takes into account visitation during peak holiday periods or during major sporting or community events and the need to minimise adverse impact.

5.9.5 Power Lines

If high voltage powerlines are located within the boundaries of the proposed burn, conditions must be imposed requiring that the person acting on the certificate must:

- at least 7 days prior to the planned burn, liaise with the electricity provider to determine when conditions are likely to be most suitable to carry out the burn and any safety requirements, and
- comply with any requirements so specified, unless those requirements are contrary to any other condition of the certificate, in which case the work cannot be conducted.

5.9.6 Significant bat colonies

If a significant bat colony identified by the DEC for the purpose of this Code is within 100 metres of a small fire or 1000 metres of a large fire, conditions must be imposed that the burn is to be carried out only when:

- the forecast weather conditions indicates that the wind will be blowing away from that area, or
- it is known that the colony is not present at the proposed time of the burn.

5.10 Standards to prevent soil erosion and instability

If a moderate intensity burn is being used, conditions must be imposed that the burn plan must include measures to ensure that moderate intensity fire is not used in areas mapped with a Soil Erosion Risk of greater than 150 (t/ha/yr). Where maps of Soil Erosion Risk are not available, the burn plan must include measures to ensure that moderate intensity fire is not used on soil surface slopes greater than 18°.

5.11 Standards for the protection of riparian buffers

No lighting of a prescribed burn is permitted within the riparian buffer zone distances specified in Table 5.2. No lighting of a windrow burn is permitted within 20 metres of any water body. The distance (metres) is measured from the highest bank or shore (or mean high water for tidal waters) on either side of the water body.

For prescribed burns being conducted near water bodies, all reasonable steps (excluding clearing vegetation and the use of foams or retardants) should be taken to ensure that the fire does not burn within the riparian buffer zone. Fires should be lit under conditions so that if they do burn within the riparian buffer zones they are patchy and low intensity.

Riparian buffer zone restrictions do not apply to prescribed burns within the following vegetation formations of Keith (2004): freshwater wetlands (excluding vegetation classes excluded under clause 2.4) and forested wetlands.

Water body	Riparian buffer zone width (metres)
1 st Order and unmapped streams	5
2 nd Order Streams; Wetlands, Lakes and Lagoons greater than or equal to 0.1 ha but less than 0.5 ha	5
3 rd Order Streams; Wetlands, Lakes and Lagoons greater than or equal to 0.5 ha but less than 2 ha	10
4 th Order Streams & greater; Estuaries; Wetlands, Lakes and Lagoons greater than or equal to 2 ha	20

Table 5.2 Riparian buffer zone widths for burning

5.12 Standards for the protection of Aboriginal heritage

5.12.1 Determining presence of Aboriginal heritage sites

5.12.1.1 Determining presence for issuing authorities

The issuing authority must refer the application to the DEC (Cultural Heritage Division) where burning is proposed in the following circumstances:

- unharvested native forest areas, and areas in asset protection zones not previously subject to burning, where there is a likelihood that scarred and carved trees exist, and
- land with known rocky outcrops, rock platforms or rock shelters, where there is a likelihood of artwork (especially painted art) existing.

The issuing authority must provide the DEC with a full copy of the applicant's application for a certificate, and any other relevant information held by the issuing authority necessary to ascertain the location of the proposed hazard reduction work (e.g. maps).

The DEC will provide information within 3 working days, detailing any Aboriginal sites of concern. The 3 working day turn around does not commence until receipt of the documents (as specified above) by the DEC.

If the DEC does not meet the 3 working day turn around then the issuing authority may proceed to issue the certificate.

5.12.1.2 Determining presence for certifying authorities

Certifying authorities that do not have a data licence agreement must refer the proposal details to DEC (Cultural Heritage Division) in the circumstances described in 5.12.1.

The DEC will provide information within 3 working days, detailing any Aboriginal sites of concern. The 3 working day turn around does not commence until receipt of the documents (as specified above) by the DEC. If the DEC does not meet the 3 working day turn around then the certifying authority must consult with DEC before proceeding with the certificate.

Certifying authorities that have a data licence agreement in place with the DEC are not required to refer to the DEC (for the areas subject to the licence agreement).

5.12.2 Determining management conditions for Aboriginal heritage

Where Aboriginal heritage sites are indicated to be present, then the hazard reduction works must be undertaken in accordance with the relevant conditions specified in the RFS/DEC document *Conditions for Hazard Reduction and Aboriginal Heritage*.

5.13 Standards for the protection of other cultural heritage

If there is a site on the national, state or local heritage register that may be affected by the proposed work, conditions must be imposed to protect the site. Such conditions must be consistent with the RFS/NSW Heritage Office document *Guidelines for Bush Fire Hazard Reduction Works Affecting Heritage Items*.

5.14 Standards for the protection of significant environmental protection areas

If there are any environmental protection areas zoned within the local environmental plan (LEP) or plan of management relevant to the area of proposed work conditions must be imposed to ensure the works are consistent with the objectives of the zone/plan to protect the environmental values of the area.

5.15 Standards relating to weeds

If there are species listed by the local authority as noxious or environmental weeds within the area where work is proposed, conditions must be imposed to prevent the spread of weeds.

Herbicides can only be used within this Code for removing weeds.

Herbicides cannot be used within 100 metres of the known location of any species listed in the Threatened Species Hazard Reduction List, unless the List states otherwise. The use of herbicides near water bodies must not be undertaken if likely to result in water pollution.

Where herbicides are to be used, conditions must be imposed that the user is required to:

- use only herbicides registered by the Australian Pesticides and Veterinary Medicines Authority (www.apvma.gov.au) that are approved for the intended situation of use,
- strictly adhere to any directions on the label,
- not risk injury to persons, property and non-target plants and animals through the use of a herbicide,
- operate in accordance with Weed CRCs Best Practices Management Guidelines,
- use in accordance with the requirements of the *Pesticides Act 1999*, and the *Protection of Environment (Operations) Act 1997*, and
- operate in accordance with the *Noxious Weeds Act 1993*.

Dictionary

approved burn plan means a prescribed burning plan approved by a fire fighting agency.

biodiversity means the variety of life forms, different species of plants, animals and micro-organisms, the genes they contain and the ecosystem they form.

boundary fence means a fence erected on the boundary separating land owned by different persons/agencies.

bush fire mosaics are areas within a landscape which have been or are planned to be burned at different times.

control line means a defined perimeter used to stop a fire escaping from a designated burn area.

drainage structure means any structure (such as a culvert, crossbank, mitre etc) that diverts the flow or potential flow of water onto a stable surface capable of handling concentrated flow (such as a vegetated or non-erosive surface).

fire interval means the length of time between successive fires on an area of land.

high intensity prescribed burning means the use of fire intended to result in the removal of a substantial portion of the shrub layer. On average flame heights will be greater than two metres and some canopy fire may occur.

Keith (2004) refers to David Keith, (2004) *Ocean Shores to Desert Dunes: the native vegetation of NSW and the ACT*. DIPNR (NSW) and NSW NPWS (DEC).

low intensity prescribed burning means the use of fire intended to result in the removal of the leaf litter, grass and shrub layer with minimal canopy scorching. Fires will be patchy and the actual area burnt may vary between 40% and 80%. The average flame height will be less than one metre. This can be achieved by lighting under conditions where a combination of some or all of following factors influence fire behaviour - low fuel loads, moist fuels, low temperatures, high humidity, low wind speeds and fire lighting patterns.

maintenance only includes work undertaken to ensure a structure or infrastructure retains its original function, and does not include upgrading for a higher level of use, nor includes work undertaken on areas which have not been maintained for more than 10 years.

mechanical work includes the use of:

- hand tools (e.g. rakes, hoes, leaf blowers)
- hand held machinery (e.g. brushcutters, domestic-size lawn mowers, chainsaws)
- slashing machinery (e.g. ride-on lawn mowers, slashers, triters, reach mower/flail head extensions)
- graders, dozers, and ploughs for removal of vegetation only, not earth-moving.

moderate intensity prescribed burning means the use of fire intended to result in the removal of a substantial portion of the shrub layer. On average flame heights will be between one and two metres and some canopy scorching may occur. These fires are often patchy and the moister creeks generally will not be burnt. This type of prescribed burning is generally used for hazard reduction to provide asset protection closer to the urban interface.

native vegetation means any indigenous vegetation as defined in section 6 of the *Native Vegetation Act 2003*.

natural/existing containment line means an existing feature that is adequate as a control line (e.g. a road, track, trail, watercourse, cleared area).

peat soils means soils containing a significant amount of peat at the surface, which may pose a bushfire threat upon drying out.

Planning for Bush Fire Protection means the document of that name as published and adopted for the time being by the NSW Government.

plantation is as defined in section 5 of the *Plantations and Reafforestation Act 1999*, where the area covered is greater than 30 hectares.

significant bat colonies are those areas identified by the DEC as being significant and for which current data is available.

Soil Erosion Risk (SER) means a classification given to an area of land from the DIPNR SER map. The SER map has been derived from soil regolith, rainfall erosivity and slope values.

stream means a natural or artificially enhanced channel down which surface water concentrates and flows that is identified on a 1:25,000 topographic map published by the Government (or if not published, the map of the finest scale so published) and classified as being perennial, intermittent or seasonal, or ephemeral where:

- a) perennial means a stream that flows continuously, these streams are generally associated with a water table in the localities through which they flow, and
- b) intermittent or seasonal means a stream that flows only in certain times of the year, and
- c) ephemeral means a stream that flows only in direct response to rainfall, and whose channel is mostly above the water table.

stream order means the ranked number given to a watercourse using the Strahler system.

time since fire means the length of time since an area of land was last burnt, as at the date of determining the certificate.

Threatened Species Hazard Reduction List means the document of that name (inclusive of Parts 1, 2 and 3) prepared by DEC and located on the RFS website. It includes a list of threatened species, populations and ecological communities and associated management conditions.

Threatened Species Hazard Reduction Map means the data layers containing localities of threatened species, populations and ecological communities prepared by DEC (or maps identified by DEC to be suitable) for the purpose of implementing the Threatened Species Hazard Reduction List.

tree means a perennial plant with one or more self-supporting trunks, which has:

- a) a height of 3 metres or more, or
- b) a branch spread of 3 metres or more, or
- c) at least one trunk with a girth of 300 millimetres or more at a height of 1.3 metres above ground level.

vegetation class is as defined in Keith (2004).

vegetation community means a vegetation assemblage specified within a vegetation map or report. It may or may not correlate directly with one of the vegetation classes specified within Keith (2004).

vegetation formation means a broad vegetation grouping, either as defined in Keith (2004) or as described within a bush fire risk management plan.

Weed CRCs Best Practices Management

Guidelines are guidelines for bush regeneration weed management. They can be accessed at the Weed CRC website (www.weeds.crc.org.au)

wetland means any shallow body of water (such as marsh, billabong, swamp or sedgeland) that is inundated cyclically, intermittently or permanently with water.

windrow means a row of cut vegetation pushed up for clearing (for example timber which is pushed into lines for burning during a clearing operation) and includes post logging waste material.

water body means a natural water body, whether or not artificially modified that is identified on a 1:25,000 topographic map published by the Government (or if not published, the map of the finest scale so published), including:

- a) a lake, lagoon or wetland,
- b) a stream, or
- c) tidal waters including any bay, estuary or inlet.

Appendix A - Fire Interval Table for SFAZs and LMZs.

Vegetation Formation (and Chapter in Keith 2004)	Minimum fire interval for SFAZ (years)	Minimum fire interval for LMZ (years)
Rainforests (1)	No burning permitted	No burning permitted
Wet sclerophyll forests (shrubby subformation) (2)	25	30 Low intensity fire only
Wet sclerophyll forests (grassy subformation) (2)	10	15 Low intensity fire only
Grassy woodlands (3)	5	8
Grasslands (4)	2	3
Dry sclerophyll forests (shrub/grass subformation) (5)	5	8
Dry sclerophyll forests (shrubby subformation) (5)	7	10
Heathlands (6)	7	10
Alpine complex (7)	No burning permitted	No burning permitted
Freshwater wetlands (8) excluding classes excluded under 2.4	7	10
Forested wetlands (9)	7	10
Saline wetlands (10)	No burning permitted	No burning permitted
Semi-arid woodlands (grassy subformation) (11)	6	9
Semi-arid woodlands (shrubby subformation) (11)	10	15
Arid shrublands (chenopod subformation) (12)	No burning permitted	No burning permitted
Arid shrublands (acacia subformation) (12)	10	15

- This schedule has been prepared for the specific purpose of this code and cannot be used as a guide for other purposes.