



CARING
FOR
OUR
COUNTRY

NSW 2010-11

Environmental Stewardship

Multiple Ecological
Communities Project

Information Booklet

BOX GUM GRASSY
WOODLAND

BASALT AND ALLUVIAL
GRASSLAND

WEeping MYALL
WOODLAND



Foreword

Caring for our Country – Environmental Stewardship was established in 2007-08 to assist private land managers to maintain and improve the condition and extent of threatened ecological communities and species listed under the *Environment Protection and Biodiversity Conservation Act 1999* that are impacted by activities on private land.

Environmental Stewardship uses market-based instruments to purchase environmental services from land managers. To date the preferred instrument has been the reverse auction whereby land managers bid competitively to win contracts to improve targeted environmental assets on their land.

Five reverse auction rounds have been conducted since 2008-09 targeting the critically endangered white box, yellow box and Blakely's red gum grassy woodland and derived native grasslands ecological community (known as box gum grassy woodland) across eight NRM regions in New South Wales (NSW) and Queensland. This community was targeted by Environmental Stewardship initially because of its extensive geographic range and hence potential large target market of private land managers. The remaining areas of the ecological community are located on private land, and actions on private land have the capacity to improve the condition of these remnants.

However, from the time of its establishment the Australian Government envisaged that Environmental Stewardship would target more than one ecological community. In 2010-11, Environmental Stewardship will for the first time target multiple ecological communities.

In 2010-11 box gum grassy woodland remains one of the target communities in the Central West, Namoi and Border Rivers-Gwydir Catchment Management Authority (CMA) regions. The only previous Environmental Stewardship reverse auction round conducted in the Namoi and Border Rivers-Gwydir CMA regions set a fifty hectare minimum patch size for box gum grassy woodland (BGGW) which may have excluded some land managers who would otherwise have participated. The other target communities in 2010-11 are weeping myall woodland and natural grassland on basalt and fine-textured alluvial plains of northern NSW and southern Queensland (known as basalt and alluvial grassland).

Prior to European settlement these communities were extensively distributed within their geographic range but due to clearing and agricultural practices the remnants of these communities are highly fragmented and only a small proportion remains in good condition. It is therefore important that the remaining stands of these communities are actively managed to not only maintain or enhance their condition and extent but also to contribute to the ongoing conservation of the species that rely on them for food and shelter.

The Multiple Ecological Communities (MEC) Project provides eligible land managers, who successfully bid, with the opportunity to receive Australian Government funding for up to fifteen years to actively manage and conserve one or more target communities on their land. Participation in the Project is entirely voluntary.

This booklet has been prepared to assist land managers who are considering participating in the Project to better understand the criteria for participation, what constitutes the target communities, the range of management actions that can be undertaken to maintain or improve their condition, the processes involved from the time of nominating for the Project up until a contract is signed, and monitoring arrangements.

Thank you for your interest in the Project. We trust that you find this booklet useful and after considering the information herein, you will be motivated to participate in the Project, like the 201 land managers who have already signed up to protect box gum grassy woodland on their land and in doing so, have established an environmental enterprise to complement their traditional farming enterprise.



Charlie Zammit

Assistant Secretary
Biodiversity Conservation Branch

CONTENTS

01 Environmental Stewardship Multiple Ecological Communities (MEC) Project	4	07 Managing ecological communities for conservation outcomes	37
What is the NSW MEC Project?	4	Minimum management package	37
MEC Terminology	6	Additional management package	43
How can I get involved in the MEC project?	7	Buffering	43
		Connectivity	43
02 What criteria must be met in order to participate in the NSW MEC project?	8	08 Conservation Value Measure	54
Applicant requirements	8	What is the Conservation Value Measure?	54
Property requirements	9		
Ecological community requirements	9	09 Developing a bid	55
		Bid Preparation	55
03 Who can enter into a funding agreement?	11	10 The bid evaluation process	58
04 Identifying the target ecological communities	12	11 Monitoring and evaluation	59
1 Box gum grassy woodland	12	Land manager monitoring and evaluation	59
2 Basalt and alluvial grassland	22		
3 Weeping myall woodland	26	12 Covenanted your site	60
		What are conservation covenants?	60
05 Site assessment	31	13 Taxation of payments under the Multiple Ecological Communities Project	61
What happens during a site assessment?	31	14 Stewardship payments and Centrelink	62
What happens after the site assessment?	33	15 Frequently asked questions and answers	63
06 State and Transition Models for the target ecological communities	34		
What is a State and Transition Model?	34		

What is Environmental Stewardship?

Environmental Stewardship is part of the Australian Government's more than \$2 billion Caring for our Country initiative.



Environmental Stewardship
has as its objective:

*to maintain and improve the condition
and extent of targeted high public value
environmental assets on private land.*

01

Environmental Stewardship Multiple Ecological Communities (MEC) Project

Depending on the assets that are targeted, Environmental Stewardship aims to achieve a range of outcomes including:

- improved habitat across the landscape
- increased viability, integrity and buffers to high quality remnants for species, ecological communities, Ramsar wetlands and World Heritage Areas
- improvements to the long-term protection of nationally endangered species and ecological communities
- improvement in the condition and function of ecological communities
- enduring changes in land manager attitudes and behaviour towards environmental protection and sustainable land management practices.

Environmental Stewardship funding is allocated through a reverse auction process whereby participating land managers bid competitively with other participating land managers to have management activities on their site funded.

To date Environmental Stewardship has targeted a single ecological community listed under the *Environment Protection and Biodiversity Conservation Act 1999* – the critically endangered white box, yellow box and Blakely's red gum grassy woodland and derived native grassland ecological community (box gum grassy woodland).

What is the NSW MEC Project?

The NSW MEC Project reflects a further development in the Australian Government's provision of assistance to private land managers through Environmental Stewardship. It does this in two ways. First the NSW MEC Project targets three distinct ecological communities that co-occur in the Central West, Namoi and Border Rivers-Gwydir CMA regions in NSW.

Second, the Project aims to broaden land manager engagement by providing opportunities for specific management actions that better integrate conservation activities on targeted ecological communities with those occurring in the neighbouring agricultural lands or individual properties.

1



The NSW MEC Project in 2010-11 is targeting the following three ecological communities in the Central West, Namoi and Border Rivers-Gwydir CMA regions in NSW:

- box gum grassy woodland
- weeping myall woodland
- basalt and alluvial grassland



- 1 box gum grassy woodland
Photo: Andrew Knop
- 2 weeping myall woodland
Photo: Andrew Knop
- 3 basalt and alluvial grassland
Photo: Simon Attwood

2



3



The following map shows the possible extent of the target ecological communities within the three target CMA regions.

As with previous rounds, participation is voluntary and land managers can withdraw from the Project at any stage up until contracts are executed.

The MEC Project is supported by a purpose built metric designed to provide a conservation value score for one or more ecological communities. For the first time under Environmental Stewardship land managers may receive funding support to establish and manage buffers and conserve paddock trees that provide connectivity between existing remnants of the target ecological communities, where these are important to reduce the threat of isolation and improve habitat across the landscape.

Financial contracts between the Government and land managers are available from 10 to 15 years. In other words, successful land managers can receive an annual payment to look after and improve the quality and extent of agreed areas of target ecological communities on their land for this period, subject to satisfactory compliance with management actions and reporting.



MEC Terminology

As you read through this booklet you will encounter some new terminology. It is important that you understand what these terms mean. These terms and their meaning are described below.

Primary Management Unit (PMU)

This term means an area of a target threatened ecological community that is in similar condition and requires similar management.

It could be that the area of the targeted ecological community that you initially nominate is your PMU. This would be the case if the entire area that you nominate is in a consistent condition e.g. woodland with a consistent overstorey and understorey. However, if on inspection it is determined that the community exists in two different conditions e.g. part woodland as described previously and part derived grassland, then your nominated area might be broken into two separate PMUs with separate management requirements.

Please note that the MEC Project is delivered through a market-based process. Participating land managers will compete for funding and some bids will not be successful.

Buffer Management Unit (BMU)

This term refers to an area of land that surrounds a PMU that is to be managed in order to buffer the PMU from external threats.

Connectivity Management Unit (CMU)

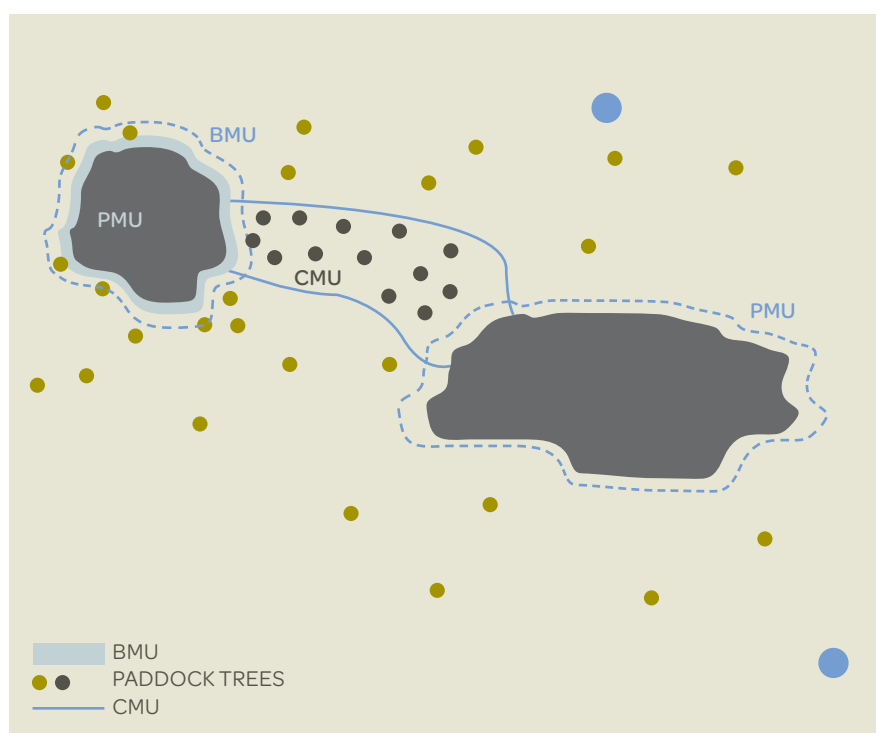
This term refers to an area of land to be managed to promote connectivity between a PMU and other woody native vegetation on or off your property. Management does not involve planting tree corridors but rather managing the existing vegetation, which may include individual paddock trees.

Secondary Management Unit

This term means a management unit that is being managed to buffer a primary management unit and/or to enhance connectivity between the primary management unit and another patch of native vegetation.

How can I get involved in the MEC Project?

- 1 If, after attending an information session and/or having read this booklet, you consider that you meet the requirements to participate (see Chapter 2), have one or more of the target ecological communities on your property (see Chapter 4) and you are prepared to undertake the management actions necessary to maintain or improve its condition (see Chapter 7), fill out the Request for Site Assessment Form accompanying this booklet and submit it to the address identified on the form by the date advised.
- 2 A field officer employed by your local Catchment Management Authority will contact you either to arrange a site visit (see Chapter 5) or to discuss your site in more detail.
- 3 If the field officer visits your property and your site is assessed as meeting the requirements for the project, you will be provided with some options for managing the site in order to improve its condition. Some of these will be mandatory. You will be asked to select from the non mandatory recommended management actions those that you agree to undertake if your bid is ultimately successful. This may include options for buffering the site or managing connectivity if relevant. You will also be asked whether you wish to place an in-perpetuity covenant on your site.
- 4 The field officer who visited your site will pre-fill a bid form with your personal details. A management plan based on your discussion with the field officer about management actions, buffering and connectivity will also be developed. The bid form will be posted to you for you to insert your bid price (see Chapter 9). A completed management plan and a copy of the funding agreement template will be sent to you at the same time.
- 5 You must post your completed bid to the Tender Box address prior to the nominated date that will be advised on the letter accompanying your bid form. Bids will be assessed by an evaluation panel (see Chapter 10) and recommendations made to Ministers. Successful bids are those that receive Ministerial approval.
- 6 The Australian Government will contract successful bidders to actively manage their ecological community to maintain or improve its condition and to manage any buffers and/or connectivity areas that were agreed to. Contracted land managers will be required to undertake simple annual monitoring of their site and to provide an annual report on their activities (see Chapter 11).



02

What criteria must be met in order to participate in the NSW MEC Project?

The MEC Guidelines available at www.nrm.gov.au/stewardship should be read in conjunction with this booklet.

Applicant requirements

- 1 Applicants, who meet the following criteria can participate in the NSW MEC Project:
 - a) Managers of private land (freehold or leasehold), located in the targeted project regions including
 - i. corporate managers and owners
 - ii. indigenous managers and owners
 - iii. primary Producers
 - iv. hobby farmers and other managers and owners not using land for production purposes.
 - b) Where the applicant is not the owner of the land they must hold
 - i. legal right of tenure for the period to be covered by the Environmental Stewardship agreement (e.g. tenant's agreement or lease) AND
 - ii. hold, at the time of bid submission, documentary evidence of the owner's permission to undertake all activities required as part of the Environmental Stewardship contract for the duration of the contract.
 - c) Persons with the following affiliations cannot participate:
 - i. delivery agent employees (delivery agent includes those organisations directly contracted by the Commonwealth, or those subcontracted by an organisation directly contracted by the Commonwealth. Employees include permanent, non-ongoing employees, and temporary contractors)
 - ii. delivery agent board members
 - iii. Australian Government employees with the Department of Agriculture, Fisheries and Forestry, or the Department of Environment, Water, Heritage and the Arts. (Employees include permanent, non-ongoing employees, and temporary contractors)
 - iv. spouses, cohabitants, co-owners, tenants, or business partners of any of the above.
- 2 Applicants may make only one bid per property. The application may cover:
 - a) one or more areas within the property
 - b) one or more target threatened ecological communities within the property.
- 3 Applicants must be Australian residents.
- 4 Applicants must be registered for tax purposes in Australia and have an Australian bank account.
- 5 Applicants must be prepared to enter into a contract with the Australian Government to supply specified management services for a minimum of 10 and a maximum of 15 years.
- 6 Applicant bid proposals above \$3.5 million will not be considered.
- 7 Joint bids (i.e. a single bid covering more than one property) will not be accepted.

Property requirements

- 8 Properties must be in one of the following targeted NSW CMA regions:
- Central West
 - Namoi
 - Border Rivers-Gwydir.
- 9 Eligible properties are privately owned properties within the target NRM regions including:
- properties owned through freehold or leasehold arrangements
 - properties that extend beyond the boundary of the target NRM region as long as part of the property is within the NRM boundary (the whole property will be eligible in this case).

Ecological community requirements

- 10 Eligible sites must contain one or more of the following endangered ecological communities:
- White box (*Eucalyptus albens*), yellow box (*Eucalyptus melliodora*) Blakely's red gum (*Eucalyptus blakelyi*) grassy woodland and derived native grasslands (box gum grassy woodland),
 - Weeping myall (*Acacia pendula*) woodlands,
 - natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland (basalt and alluvial grassland).
- 11 Each individual area of the target ecological community for which funding is sought must meet the minimum hectare requirements:
- Box gum grassy woodland
10 hectares
 - Weeping myall woodland
5 hectares
 - basalt and alluvial plains grassland
0.5 hectares.
- 12 Box gum grassy woodland areas are not eligible if they have been cropped at any time in the past.
- 13 Areas with more than 10 per cent total ground cover of any or all of the following weed species will not be eligible:
- African love grass
 - Chilean needle grass
 - Coolatai grass
 - serrated tussock
 - cane needle grass.



- 1 Coolatai grass
Photo: Paul Ryan
- 2 Serrated tussock
Photo: Graham Hodge

14 Areas covered by an existing in-perpetuity conservation covenant are eligible. Funding will not be available for capital works or management activities already committed to under existing covenanting arrangements.

15 With the exception of those areas identified at criterion 14, areas to be contracted under Environmental Stewardship must not be covered by an existing binding agreement (e.g. contract or legal agreement), or be receiving funding for, activities similar to or in conflict with activities required under the Environmental Stewardship agreement.

16 Existing or proposed covenants will be recognised where at least 30% of the target threatened ecological communities to be managed under contract is/will be covered by an in perpetuity covenant*.

** Covenanting agencies may have minimum covenant areas that are greater than 30% of a proposed area. Land managers should ensure they understand these requirements.*



Superb parrot
Photo: Graham Hodge



03

Who can enter into a funding agreement?

The Australian Government can only enter into an agreement with one or more recognised legal entities. Examples of such entities include an individual or a company, an individual or company acting as a trustee, or individuals who have formed a partnership. If you have established a number of legal entities to manage your affairs, you should consider which of those entities is appropriate for your situation before filling in the Request for Site Assessment Form. You may wish to seek advice from your legal adviser or accountant.

If multiple entities are entering the agreement with the Australian Government, all of the entities will be legally responsible under the agreement.

If entering into a conservation covenant as part of the agreement, one of the entities entering into the agreement with the Australian Government must be the owner of the nominated property.

If not entering into a conservation covenant, at least one of the entities entering into the agreement with the Australian Government must either:

- a) be the owner of the nominated property
- OR
- b) have a lease on the property for the period of the proposed agreement.

If none of the entities are the owner, a signed Letter of Authorisation from the owner(s) will need to be submitted at the time the bid is submitted.

If an ABN is to be used for payments under the agreement, the legal name associated with the ABN must precisely match the name of one of the legal entities on the agreement.



You are encouraged to check your ABN registration details at www.abr.business.gov.au and/or talk to your financial adviser if unsure.

04

Identifying the target ecological communities

An ecological community is a naturally occurring group of plants, animals and microorganisms that are interacting in a unique habitat. Its structure, composition and distribution are determined by environmental factors such as soil type, position in the landscape, climate and water availability.

1 Box gum grassy woodland

The box gum grassy woodland ecological community was originally extensively distributed from Southern Queensland to Central Victoria throughout what is commonly known as the wheat-sheep belt. The community occurs on moderately to highly fertile soils, at altitudes of 170–1200m, and where average annual rainfall is between 400 and 1200 mm.

Box gum grassy woodland is characterised by a species-rich understorey of native tussock grasses, herbs and scattered shrubs, and the dominance, or prior dominance, of white box, yellow box or Blakely's red gum trees.

The community exists in two forms:

- a) with tree cover, i.e. woodland, and
- b) without tree cover, i.e. derived grassland.

a) Woodland

Overstorey

“Overstorey” means the trees which form the canopy, or top layer, of the woodland.

Box gum grassy woodland as it exists in the target area outside the Nandewar Bioregion (ie in the Central West CMA region) has white box, yellow box and/or or Blakely's red gum as the dominant eucalypt species. In other words, if you were to count the trees in the woodland there would be as many, or more, of one or more of these species than any other species.

These eucalypt species may dominate as individual species e.g. white box grassy woodland or they may co-exist, for example as yellow box and Blakely's red gum woodland.



White box grassy woodland Photo: Paul Ryan



Within the Nandewar Bioregion, western grey box or coastal grey box may also be dominant or co-dominant species. As can be seen from the map, the Nandewar Bioregion relates only to land managers in the Namoi and Border River-Gwydir CMA regions.

Other species of native trees may be found within this ecological community including red box (*Eucalyptus polyanthemus*), apple box (*Eucalyptus bridgesiana*), western grey box (*Eucalyptus microcarpa* – South of the Nandewar region), fuzzy box (*Eucalyptus conica*), white cypress pine (*Callitris glaucophylla*) and kurrajong (*Brachychiton populneus*).

Understorey

Box gum grassy woodland has a grassy ground layer with few or no shrubs. The grasses are mostly perennial tussocks which are often green throughout summer, especially after rain. Many species of grass are present in box gum grassy woodland with species like kangaroo grass (*Themeda spp.*), red-leg grass (*Bothriochloa spp.*), wallaby grass (*Austrodanthonia spp.*), weeping grass (*Microlaena spp.*) and spear grass (*Austrostipa spp.*) often dominant.





The photograph of the Winton cemetery near Tamworth shows a good example of white box grassy woodland. Note how the tussocks are widely spaced allowing other smaller herbs and forbs to survive and prosper.

The understorey is important in determining whether woodland is box gum grassy woodland. Shrubs can occur naturally in box gum grassy woodland – a remnant with a significant ground layer of tussock grasses and scattered or patchy distribution of shrubs is part of the ecological community.

However, the BGGW ecological community grades into shrubby woodland, especially on poorer soils throughout its range, and this shrubby woodland is not considered part of the ecological community.

A remnant with a continuous shrub layer in which the shrub cover is greater than 30 percent is considered to be a shrubby woodland, and is not part of the listed ecological community.

The photograph above depicts a woodland that is not box gum grassy woodland.

b) Derived Grassland

Derived grassland originally would have had a cover of the dominant box gum grassy woodland tree species and a species rich understorey of native grasses, herbs and forbs. In some cases most or all of the trees have been removed, but the intact grass sward still remains. These areas are still valued as habitat.



1 White box grassy woodland, Winton cemetery
Photo: Paul Ryan

2 Example of woodland that is not box gum grassy woodland
Photo: Graham Hodge

3 Derived grassland, Winton NSW
Photo: Graham Hodge

Amongst the grass tussocks many wildflowers may be found providing a very colourful display in spring. Some of the more common wildflowers include lilies, orchids, daisies and native peas.



1 Darling pea
Photo: Graham Hodge

2 Jasmine spp
Photo: Graham Hodge



3 Chocolate lily
Photo: Graham Hodge

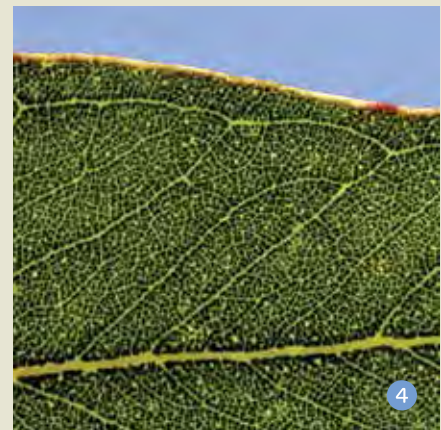
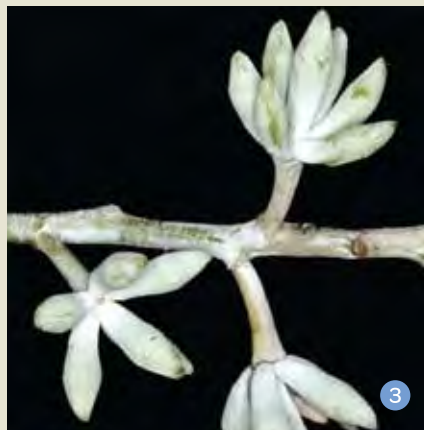
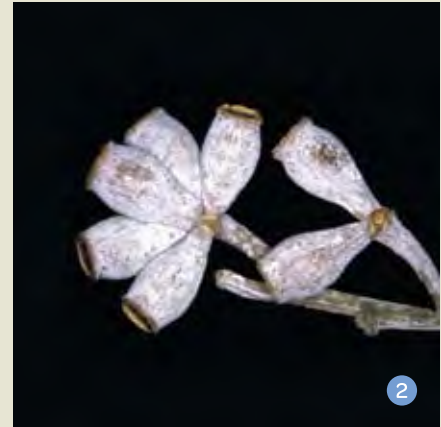
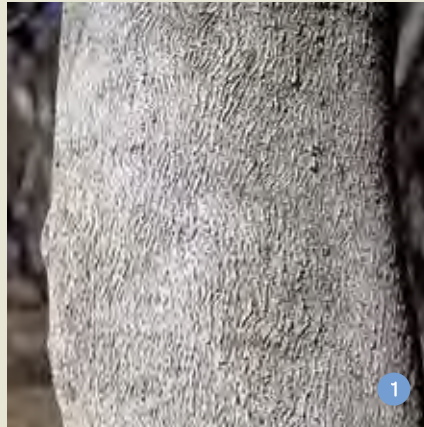
4 Bulbine lily
Photo: Graham Hodge

Characteristics of dominant Eucalypt species

a) White box (*Eucalyptus Albens*)

These trees have pale grey/white box-like bark, with broad spear-like, blue-grey leaves and pale yellow wood. This species looks similar to Western grey box except the buds and fruit are larger and often white-waxy (the leaves of grey box are narrower and olive-green).

- White box has finer bark than grey box, more 'paper-like' in texture.
- White box does not take the mallee form in having multiple trunks.
- White box is also distinct from grey box in having broad juvenile leaves.

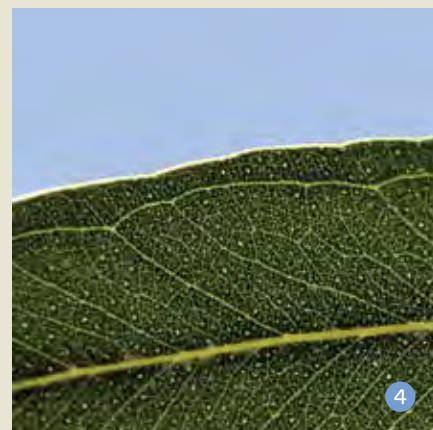
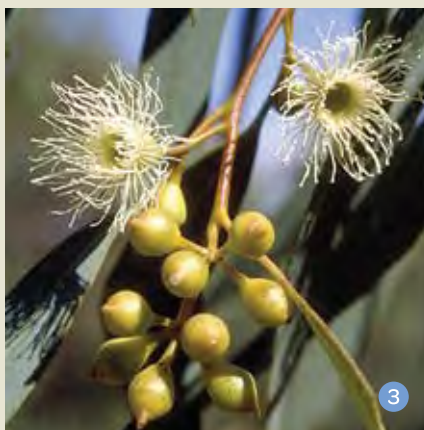


- 1 White box identifying characteristics Bark (©CPBR)
- 2 White box identifying characteristics Fruit (©CPBR)
- 3 White box identifying characteristics Bud (©CPBR)
- 4 White box identifying characteristics Leaf (©CPBR)
- 5 White box form
Photo: Peter Merritt



b) Yellow box (*Eucalyptus Melliodora*)

These trees have a spreading dense crown of fine grey-green foliage. The bark can vary from fibrous-flaky fawn to coarse dark brown. The bark is deciduous, peeling in late summer to reveal a smooth white underbark. Some trees can retain this smooth-barked character. Mature yellow box trees can range from 10 metres to 30 metres in height. They grow best on well-drained, acidic soils.



- 1 Yellow box identifying characteristics Bark (©CPBR)
- 2 Yellow box identifying characteristics Fruit (©CPBR)
- 3 Yellow box identifying characteristics Bud (©CPBR)
- 4 Yellow box identifying characteristics Leaf (©CPBR)
- 5 Yellow box Form (©CPBR)



c) Blakely's red gum
(*Eucalyptus Blakelyi*)

Blakely's red gum has mottled smooth bark, which is pale grey, cream and white with contracted areas of yellow, pink, brown or orange. The leaves are dull, green-grey.

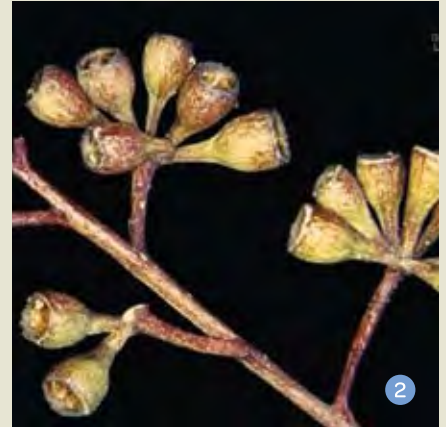
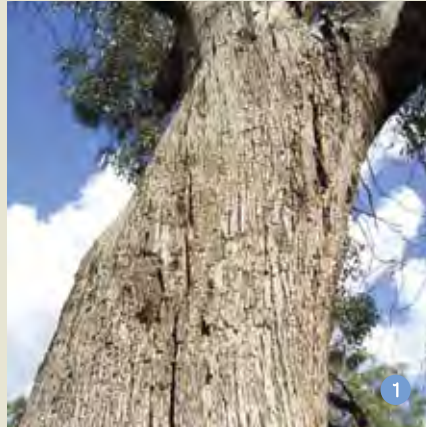


- 1 Blakely's red gum
identifying characteristics
Bark (©CPBR)
- 2 Blakely's red gum
identifying characteristics
Fruit (©CPBR)
- 3 Blakely's red gum
identifying characteristics
Bud (©CPBR)
- 4 Blakely's red gum
identifying characteristics
Leaf (©CPBR)
- 5 Blakely's red gum
identifying characteristics
Form (©CPBR)

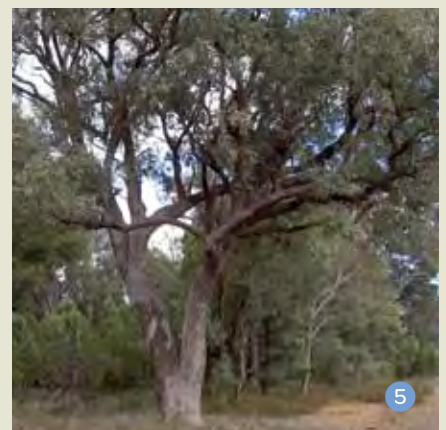
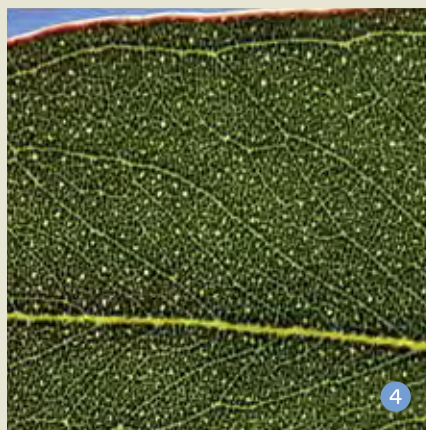


d) Western grey box
(*Eucalyptus microcarpa*)

Western grey box trees have grey bark, persistent all over the trunk. Branches are smooth and leaves are dull green, with small buds and flowers.



- 1 Western Grey Box Bark
Photo: Matt White
- 2 Western grey box
identifying characteristics
fruit (©CPBR)
- 3 Western grey box
identifying characteristics
Bud (©CPBR)
- 4 Western grey box
identifying characteristics
Leaf (©CPBR)
- 5 Western Grey Box Form
Photo: Collette Barton

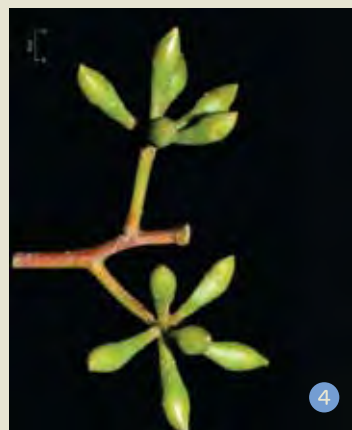


e) Coastal grey box
(*Eucalyptus moluccana*)

These trees have persistent box bark on the lower half of their trunk and smooth bark elsewhere. Their leaves are glossy green with small buds and flowers.



- 1 Coastal grey box identifying characteristics Bark (©CPBR)
- 2 Coastal grey box identifying characteristics Fruit (©CPBR)
- 3 Coastal grey box identifying characteristics Leaf (©CPBR)
- 4 Coastal grey box identifying characteristics Bud (©CPBR)
- 5 Coastal grey box identifying characteristics Form (©CPBR)



Where on rural land is box gum woodland mainly found?

Box gum grassy woodland on private land is now most often found in the “rough” or “unimproved” parts of properties as illustrated by the photographs on this page. Woodland on productive land is more likely to be degraded.

What is not box gum grassy woodland?

Box gum grassy woodland does not occur in:

Floodplains – Low-lying areas along major waterways that are subject to periods of flooding and are usually dominated by river red gum trees, reeds and rushes.

Foothill forests – These forests and woodlands usually occur on higher slopes, with shallow soils. Shrubs and trees including red stringybark tend to be more common in these areas, with a less well-defined native grass layer than box gum grassy woodland.

Weeds to watch out for

Perennial grassy weeds – some weed species e.g. Chilean needle grass, serrated tussock, Coolatai grass and African lovegrass might be confused with native species and should be controlled wherever found. For information on these and other weed species please contact the authority responsible for weed management in your local area. If you are unsure who your weed authority is ask your local CMA office.



1 Woodland on rocky hilltop
Photo: Ian Davidson

2 Woodland on rough, unimproved country,
Photo: Graham Hodge

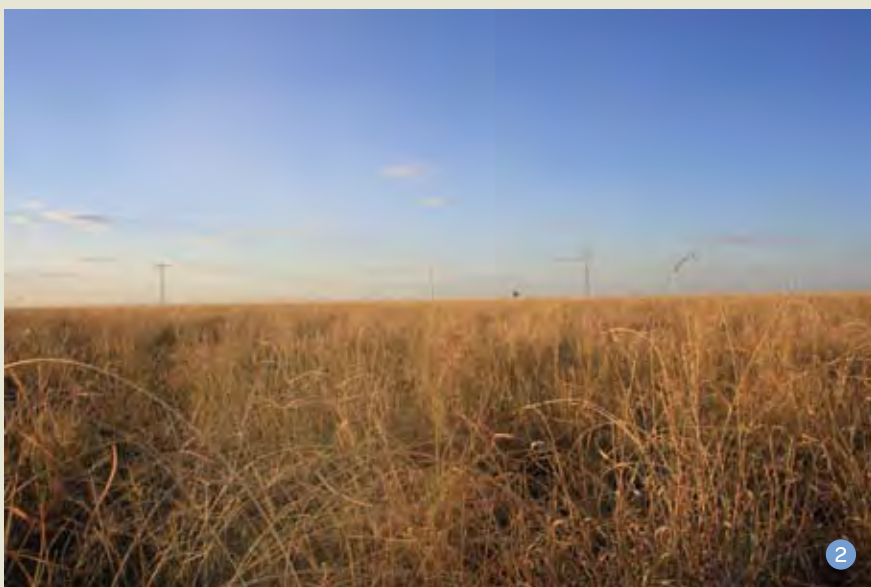
2 Basalt and alluvial grassland

The basalt and alluvial grassland ecological community occurs on clay plains west of the Great Divide, extending roughly from Kingaroy–Miles, south to the NSW–Queensland border between Goondiwindi and Stanthorpe, then, in NSW, west to Collarenebri and south to Scone and Dubbo.

Basalt and alluvial grassland has a ground layer that is typically dominated by perennial native grasses and includes a range of herbs such as native daisies, lilies and possibly orchids.

There is usually no tree cover but, if present, it is sparse (less than ten per cent projected crown cover). Tree species that may be present as scattered individuals include: weeping myall (*Acacia pendula*), white box (*Eucalyptus albens*), fuzzy box (*Eucalyptus conica*), coolabah (*Eucalyptus coolabah*), yellow box (*Eucalyptus melliodora*), poplar box (*Eucalyptus populnea*) or forest red gum (*Eucalyptus tereticornis*).

Similarly there is usually little shrub cover, although shrub cover may get locally dense at some sites. Shrub species may include prickly moses, butterbush, riceflowers and bluebushes.



1 The basalt and alluvial grassland ecological community occurs on clay plains Photo: Simon Attwood

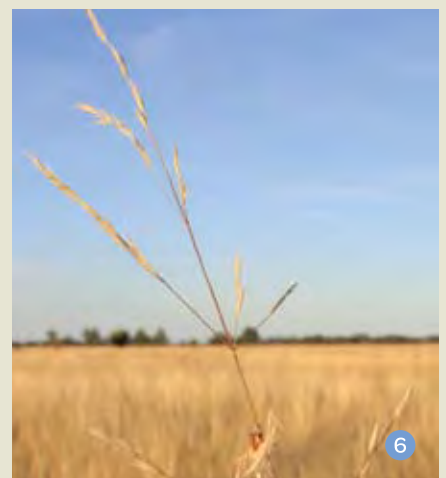
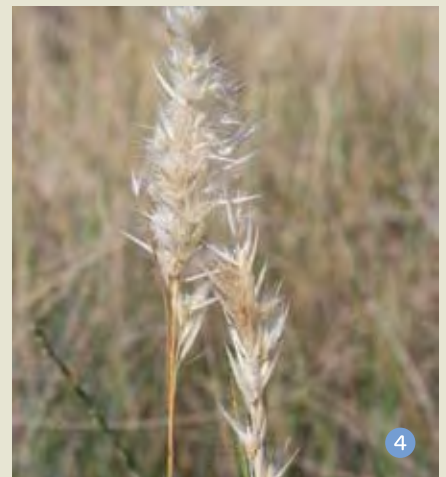
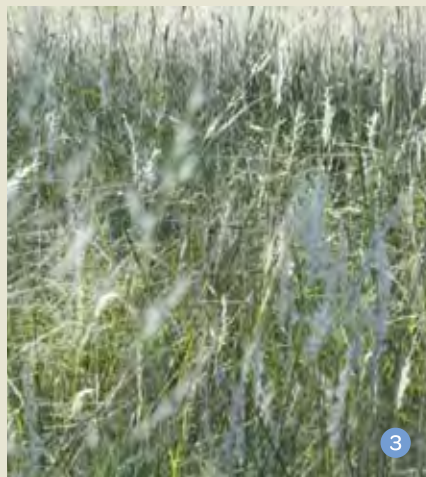
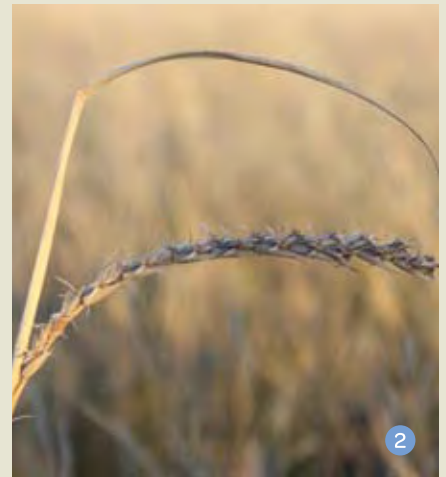
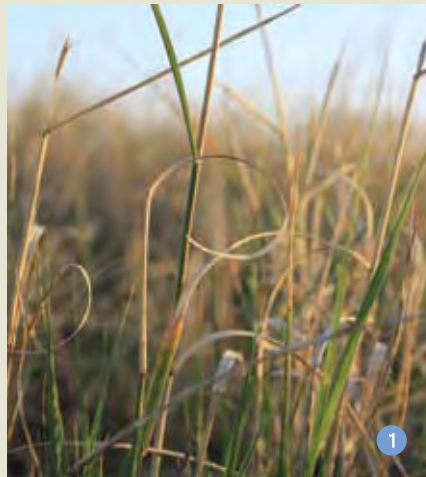
2 Typical basalt and alluvial grassland Photo: Simon Attwood

The species composition of tussock grasslands varies throughout its range and is influenced by factors such as rainfall, soil, geology and land use history.

To be basalt and alluvial grassland, three or more perennial native grass species must be present. The following are common perennial native species found in basalt and alluvial grassland.

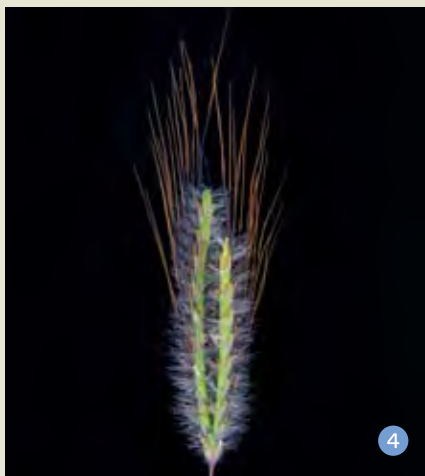
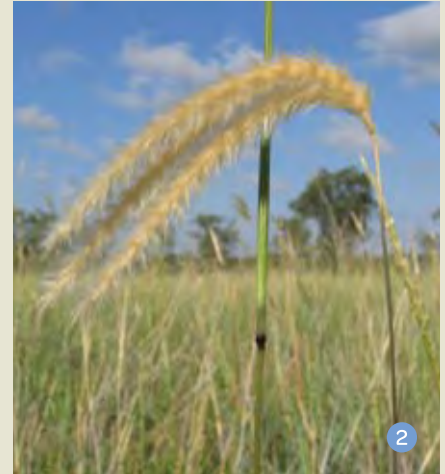
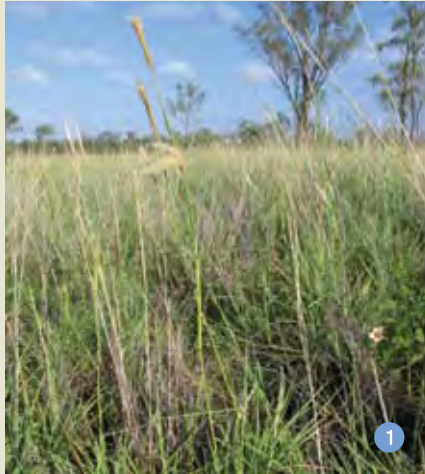


- 1 Curly Mitchell grass
Astrebla lappacea
Photo: Simon Attwood
- 2 Curly Mitchell grass
Astrebla lappacea
Photo: C Gardiner
- 3 Wallaby grass
Austrodanthonia bipartita
Photo: Graham Hodge
- 4 Wallaby grass
Austrodanthonia bipartita
Photo: Simon Attwood
- 5 Plains grass
Austrostipa aristiglumis
Photo: H Rose
- 6 Plains grass
Austrostipa aristiglumis
Photo: Simon Attwood



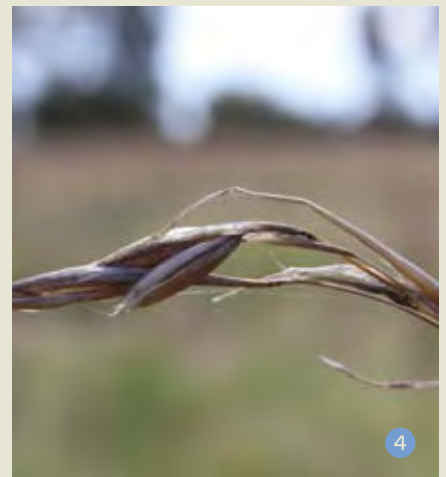


- 1 Satin top grass
Bothriochloa erianthoides
Photo: Don Butler,
Queensland Herbarium,
Queensland Department
of the Environment and
Natural Resources
- 2 Satin top grass
Bothriochloa erianthoides
Photo: Don Butler,
Queensland Herbarium,
Queensland Department
of the Environment and
Natural Resources
- 3 Queensland bluegrass
Dichanthium sericeum
Photo: H Rose
- 4 Queensland bluegrass
Dichanthium sericeum
Photo: H Rose
- 5 Wheat grass
Elymus plurinervis
Photo: L McWhirter





- 1 Silky brown top
Eulalia aurea
Photo: J Kidston
- 2 Silky brown top
Eulalia aurea
Photo: H Rose
- 3 Native oat grass
Themeda avenacea
Photo: Paul Ryan
- 4 Native oat grass
Themeda avenacea
Photo: Simon Attwood
- 5 Kangaroo grass
Themeda triandra
(or *Themeda australis*)
Photo: Paul Ryan
- 6 Kangaroo grass
Themeda triandra
(or *Themeda australis*)
Photo: Simon Attwood



Plains grass (*Austrostipa aristiglumis*) tends to dominate Liverpool Plains grasslands, and Mitchell grasses (*Astrebla spp.*) usually dominate grasslands on the Moree Plains and in the Lower Namoi.

Where on rural land is basalt and alluvial grassland mainly found?

The ecological community is generally found on level ground rising to gentle slopes (less than 5 percent) on finely textured, typically cracking clay soils derived from either basalt or quaternary alluvium.

As slope increases, soils are no longer the same as the clays on the plains (although they can still be self-mulching black cracking clays), and grassland is replaced by grassy woodlands, sometimes with a ground layer similar to that of basalt and alluvial grassland.

What is not basalt and alluvial grassland?

Basalt and alluvial grassland does not occur on slopes greater than 5 percent (one degree).

Weeds to watch out for

Coolatai grass, lippia, buffel grass, turnip weed and African love grass compete with and displace native grass species in clay plains grasslands. Some exotic perennial grass species such as Coolatai grass can alter fire regimes that affect the structure and biodiversity of native vegetation.

3 Weeping myall woodland

Other common names for weeping myall (*Acacia pendula*) include *myall*, *boree*, *balaar*, *nilyah*, *bastard gidgee*, and *silver leaf boree*.

The weeping myall woodland ecological community occurs in small pockets on the inland alluvial plains west of the Great Divide in NSW and Queensland. In some areas of northern NSW, such as around Warialda and Bingara, the community may occur on rises and broad depressions in more elevated terrain, in soils that are not alluvial.

Weeping myall woodland varies from open woodland (less than 10 percent foliage cover) to woodland (10 percent – 30 percent foliage cover) and trees are typically 4-12 m tall. Weeping myall (*Acacia pendula*) trees can be the sole overstorey species or the dominant species often occurring with *belah* (*Casuarina cristata*) and *wild orange* (*Capparis mitchellii*). P oplar box, western rosewood, whitewood or black box may also be present.



1



2



1 Photo: Graham Hodge

2 Photo: Simon Attwood

Grey mistletoe (*Amyema quandang*) commonly occurs on the branches of weeping myall trees throughout the ecological community's range.

The understorey of weeping myall woodland often includes an open layer of shrubs above a diverse and open ground layer of grasses such as wallaby grasses (*Austrodanthonia* spp.), Mitchell grasses (*Astrebla* spp.) and Queensland blue grass (*Dichanthium sericeum*), and herbs.



Grey mistletoe in weeping myall
Photo : Graham Hodge

The ecological community can exist naturally as either a shrubby or grassy woodland, however in many areas the shrub layer has disappeared through overgrazing and dieback events and the woodland now has a primarily grassy understorey.

Weeping myall goes through regular cycles of senescence (aging and death) and regeneration. Weeping myall trees are also susceptible to defoliation by bag-shelter moth (*Ochrogaster lunifer*) caterpillars. Therefore, weeping myall trees that are in a living, defoliated or dead state, can dominate the ecological community.



- 1 Queensland blue grass ground layer in weeping myall
Photo: Simon Attwood
- 2 Wallaby grass ground layer in weeping myall
Photo: Graham Hodge
- 3 Weeping myall woodland
Photo: Simon Attwood



Characteristics of dominant species

Weeping myall is characterised by a heavy bloom of pale yellow ball flowers in racemes in the spring and winter. This tree is known to flower irregularly other times of the year.

Where on rural land is weeping myall woodland mainly found?

The community generally occurs on black, brown, red-brown or grey clay or clay loam soils, in flat areas, shallow depressions or gilgais on raised alluvial plains. Some stands also occur on elevated ridges and crests on brown clay-loam and red-earth soils.



- 1 Bag-shelter moth caterpillar
Photo: Simon Attwood
- 2 Weeping myall flower
Photo: Simon Attwood
- 3 Weeping myall fruit
Photo: ©M. Fagg Australian National Botanic Gardens



What is not weeping myall woodland?

Weeping myall woodland is unlikely to occur in areas that are flooded periodically, and/or do not drain rapidly if inundated.

Weeds to watch out for

Some weeds known to threaten weeping myall woodland include African boxthorn, Paterson's curse, brome grasses, storksills, rubble peppercress, medics, mustards and clovers. These weeds often out-compete indigenous species for space, nutrients and water, which in some cases can lead to structural changes to the community.



1 The community generally occurs on black, brown, red-brown or grey clay or clay loam soils, in flat areas
Photo: Graham Hodge

2 Paterson's curse
Photo: Graham Hodge

05

Site assessment

If you believe you have one or more of the ecological communities being targeted under the NSW MEC Project on your property, that you meet the other requirements for participation and, you would like to participate, you will need to arrange for an on-site assessment of the ecological communities on your property.

Please be aware that you need to nominate the areas of the ecological community that you want to include in the project from the outset. The field officer who visits your property will not undertake a random search of your property to see if you have any of the target communities – their role is only to assess areas of the communities that you nominate.

To instigate an on-site assessment you need to complete the Request for Site Assessment Form accompanying this booklet and return it to the address on the bottom of the form as soon as possible.

The delivery agent has been asked to undertake a maximum of 150 site assessments across the three CMA regions in the current funding round. If more than 150 requests for site assessments are received, it is agreed that they will be prioritised on a first in, first served basis – so return your form quickly if you want to participate.

What happens during a site assessment?

The site assessment process is as follows:

- 1 After receiving your Request for Site Assessment Form the delivery agent will appoint a field officer to manage your request. The field officer will undertake an initial desktop assessment of your site, based on the information you provide on the Request for Site Assessment Form. If the field officer determines that your site is likely to meet the criteria for participation you will be contacted by phone to organise a time for an on-site assessment and to answer any questions you may have regarding the MEC Project.
- 2 Having established an agreed time and date with you, the field officer will come to your property. Before inspecting your nominated areas the field officer will want to have a bit more of a discussion with you about the areas you have nominated. You will then be asked to direct the field officer to the nominated areas to enable the site inspection. The field officer will want to know the past management history of the nominated areas.
- 3 The first priority for the field officer will be to confirm that your nominated areas are the target community, are of sufficient size to meet the criteria for participation and that there are none of the identified weed species over more than 10% of the nominated areas. Should the areas fail to meet one of these criterion, the field officer will not proceed further with the rapid appraisal of the area.

- 4 Once the field officer determines that the nominated area meets the requirements for participation, it is assessed to decide whether it is comprised of a single state (under the State and Transition model for that particular ecological community) or multiple states in which case the field officer will identify the different States using GPS measurements. A 50 metre X 20 metre plot will be established in each delineated area and a rapid appraisal undertaken to confirm the State of the nominated area. Different states are likely to require different management and the data collected will inform the recommendations that come from the metric tool.
- 5 The field officer will then assess the major threats within the nominated areas and outside it – the nature of the threats that will be assessed are described in the additional management package discussed in Chapter 7.



- 1 Wild oats and Paterson's curse pose a threat to adjacent woodland
Photo: Graham Hodge
- 2 Spray and fertiliser drift from adjacent agricultural land can pose a threat
Photo: Simon Attwood

- 6 The field officer will then enter the management information collected in discussions with you and from the on-site assessments into the Conservation Value Measure (CVM) on a laptop computer. The tool will generate some management recommendations for each of the different delineated states within the nominated ecological community areas.
- 7 The field officer will then want to discuss the management recommendations with you.

Remember that there are a suite of mandatory actions that every successful bidder in the MEC Project will have to undertake and then a package of additional management activities, buffering and connectivity actions that you can choose to undertake.

- 8 If the CVM recommends optional buffering or connectivity related actions to which you are amenable, the field officer will need to confirm the actual boundaries of these secondary management units with you. You may be required to accompany the field officer back into the paddock to take GPS readings to enable these units to be accurately drawn as part of your management plan.

- 9 The field officer will also discuss whether or not you wish to covenant part or all of the nominated areas if your bid is successful. The Australian Government would like to secure the outcomes of its investment once the contract with you expires and a covenant is a means of achieving that in perpetuity. To reflect this preference, sites that are nominated for a covenant receive additional weighting in the metric tool. However, it is up to individuals to choose whether or not they wish to covenant a site. See Chapter 12 for more information on covenants.

- 10 The field officer will provide you with a summary of the outcomes of the site visit including the management actions you agreed to undertake, decisions re covenants, etc.

The site visit is a further opportunity for you to find out more about the MEC Project. Think about questions you may have before the visit and make sure you ask the field officer.

You will have further opportunities until bids need to be submitted to change your mind about the management actions you agree to undertake or any change of mind regarding a covenant. You must advise the field officer of any changes that you wish to make within a timeframe that will be advised by letter when the Bid form is sent to you.

What happens after the site assessment?

The field officer will accurately map your site using GIS before preparing a management plan based on the discussions with you during the site assessment.

The field officer will return the management plan to you along with a bid application pre-filled with your name and property information. You will be required to confirm within a specified timeframe that the management actions and any covenanting arrangements described are what you are prepared to undertake. The field officer can discuss any issues you might have or alter the management plan as necessary. Where alterations are required, the revised information will be re-entered into the Conservation Value Measure, and a revised score for your site calculated. A final bid application package will then be provided to you to enable you to finalise your bid.

06

State and Transition Models for the target ecological communities

What is a State and Transition Model?

State and Transition Models provide a framework in which to understand how ecological communities change, or transition, from one State (or condition) to another in response to land use change and management.

State and Transition Models have been developed by experts for each of the three ecological communities being targeted under the NSW MEC Project. These models are incorporated into the metric, which is used to score individual sites.

It is not necessary to understand the detail of these Models in order to participate in the MEC Project. However, in order to give a little more context to the site assessment process, management actions and site scoring process described in this booklet a brief explanation of the State and Transition concept is provided here.

The diagram below depicts how State and Transition Models are normally presented.

The box in the diagram represents a particular unit of an ecological community. In the MEC Project this is called a Primary Management Unit (PMU) as previously described. A PMU exists in a particular State or condition as a result of historic and current land use.

In a State and Transition model the first box represents the State in which the PMU existed before European influence (State 1) and all subsequent boxes depict observed changes in State as land use and management alter the ecological community. The models recognise that at any one time there can be a range of threats that, if not addressed, will continue to alter the ecological condition of the community causing it to transition to a lesser State over time. These include such things as fertiliser application, cultivation, grazing intensification, introduction of exotic pasture and vegetation clearing.

If these threats are addressed and current land use is maintained then the community is likely to continue to exist in its current state (represented by the curved arrow at the top of the box). The models also recognise that with different management (see Chapter 7) and threat abatement some communities may be able to be restored to a higher condition. However, in some cases, a community may pass a threshold and even with threat abatement and change in management, it may not be possible for it to be restored within a timeframe and at a cost that is practical.

Under the MEC project, only PMUs that currently exist as States 1, 2 or 3 are eligible to participate as indicated by the management arrows. However, where a buffer management unit or connectivity management unit is recommended to enhance a PMU, these areas may be State 4 or State 5



How do the State and Transition Models relate to site assessment, management actions and site scores?

The Conservation Value Score, or score representing the relative value of each site (i.e. property), is calculated from the values entered into the Conservation Value Measure (see Chapter 8). The metric has been built specifically for the MEC Project by CSIRO in consultation with experts and it uses the logic in the State and Transition Models.

Each eligible area of the target ecological community on a land manager's property will be assessed by a field officer. The field officer will determine if this area should be considered as one or more areas for management (PMUs).



- 1 Overgrazed understorey
Photo: Simon Attwood
- 2 Cow grazing chenopod understorey
Photo: Andrew Knop



Each area assessed by the field officer will receive a score based on its current condition, threats to it and the probability of achieving an improvement in the condition of the area in fifteen years time arising from the implementation of recommended on-ground management actions. Land use history will help to determine the current State of a PMU and will be sourced from information provided on the Request for Site assessment Form and by conversation with the land manager.

If there is more than one area of a target ecological community on a property, the scores for each PMU will be aggregated and then weighted according to the duration of contract and presence/absence of a covenant. This calculation is done by the metric.



1 Sites like this with paddock trees could be connectivity units
Photo: Simon Attwood

1 Understorey is too modified to be re-instated in a reasonable time and at reasonable cost
Photo: Graham Hodge

07

Managing ecological communities for conservation outcomes

The Australian Government, in return for its investment through the NSW MEC Project, expects land managers who are successful bidders under the Project to **actively** manage their contracted sites to either retain or improve their ecological condition for the duration of the contract. This includes managing any buffers and/or paddock trees where agreed, to maintain or improve condition and/or increase extent, reduce threats and manage connectivity over the contract period.

Active management means undertaking all works required under the contract with the Australian Government, monitoring the contracted areas, observing changes in the condition of the ecological community arising from management and, in agreement with the Australian Government, modifying management where necessary and feasible. We encourage land managers to consult with professional experts and to experiment with new approaches to ecosystem management and habitat restoration within the scope of the contract.

This kind of management will require new knowledge and skills, and for some even a change in approach, as the contracted area is a biodiversity conservation resource to be managed primarily for these values.

The Australian Government will pay successful land managers for up to fifteen years for capital and labour costs and current production income foregone from managing their contracted area for biodiversity outcomes, so long as the active management is demonstrably beyond the land manager's normal regulatory responsibilities.

The current ecological condition of the contracted area will have a large bearing on the extent of change that is achievable within the contract period and the amount and type of management that will need to be undertaken.

Successful land managers will be required to prepare a three year management strategy and submit it with their first annual report outlining how and when they intend to implement the management actions they have been funded to undertake under their contract with the Australian Government.

At the completion of each three years a subsequent management strategy will be required.

Further details on the three year management strategy will be provided to successful land managers.

Minimum Management Package

All land managers who sign a contract with the Australian Government will have to undertake a Minimum Management Package of activities to conserve their ecological community/ies. Land managers must observe these minimum requirements on any PMU. The Australian Government's preference is to invest, according to value for money, in those sites on which the land manager is offering to undertake activity to manage as many threats as possible i.e. over and above the Minimum Management Package.

The Minimum Management Package to be undertaken on each PMU comprises the following management actions:

- conservation grazing (if the area is currently grazed). This means the level of total livestock grazing pressure that enables native understorey species, including palatable species, to persist.
- no cultivation
- no fertilisation
- no removal or disturbance of native vegetation (alive or dead)
- no planting of species that are not native to the ecological community
- no removal or disturbance of bush rock
- no intentional burning outside of a management plan
- all other actions associated with compliance with State and local government regulations pertaining to noxious weeds etc.

Minimum management package: details

a) Conservation grazing (where livestock grazing is practiced)

What are the conservation outcomes sought?

The primary outcomes sought from conservation grazing under the minimum management package are to:

- 1 enable grazing sensitive species to regenerate
- 2 enhance biomass of dominant understorey native species
- 3 increase diversity of native plant species

- 4 reduce browsing impact on palatable native plants
- 5 reduce nutrient inputs (e.g. stock camps)
- 6 improve litter and soil condition
- 7 facilitate natural regeneration.

Implementation

In State 1 sites there will be no grazing by domestic livestock.

For State 2 and 3 sites conservation grazing will be applied. The recommendation for conservation grazing is that short graze periods (of no more than three days) are followed by longer rest periods (of no less than 28 days but this will be determined by the regrowth of the plants). During grazing plant height should remain above 10 cm. Grazing and rest time should be managed to ensure recovery of all palatable plants.

Where strategic grazing is recommended in order to manage exotic plants or control biomass

additional criteria will apply to when and how grazing is undertaken. (See **strategic grazing**, described under Monitoring and Managing Exotic Plants as part of Additional Management Actions).

It is the responsibility of the land manager to monitor their contracted area and to stock it at a time and in a manner that will achieve the outcomes identified above.

Periodically excluding grazing has the advantage of allowing native plants to flower and set seed, it allows tree regeneration to occur more readily, reduces nutrient inputs from grazing stock, and minimises physical soil disturbances and compaction of soil.

Where grazing is practiced, land managers should ensure where practicable, that stock have the opportunity to pass ingested pasture seeds prior to being introduced to any contracted area by holding them overnight in yards, on water or in another holding area free of potential exotic species that might threaten the ecological community.



Darling Lily (Macquarie Lily) in weeping myall woodland after rest from grazing. Photo: Simon Attwood



Things to consider when preparing a bid

In order to manage grazing on your contracted area you will need a means of controlling access by livestock. This will most likely be a fence and gate. There is also the cost of maintaining the fence over the life of the project.

If there is a watering point within the contracted ecological community that currently services a larger paddock, you may need to establish an alternative watering point that will enable stock to access water from outside of the contracted area.

The cost of these capital works, as well as the income you may forego because of changing the grazing regime for your contracted area (conservation grazing for limited periods only) should be considered when costing your bid.

In considering fencing costs, you may wish to compare the cost of fencing the boundary of the contracted area, which may involve some unusual lines and hence additional materials, with the opportunity cost of fencing off a more conventional "square" boundary around the contracted area and foregoing grazing within this whole area. This option might be considered in the context of a buffer. Please discuss this option with a field officer if you are interested.

b) No cultivation

What are the conservation outcomes sought?

- 1 to maintain or improve understorey composition and structure
- 2 to reduce soil disturbance
- 3 to reduce exotic plant infestation.

Implementation

Within the contracted area, unless explicitly sanctioned and detailed in your management plan, you may not cultivate, including cultivation for firebreaks, or undertake other measures resulting in significant soil disturbance.

Things to consider when preparing a bid

No significant costs should arise from restrictions on cultivation. Other management actions address pest management.

c) No fertilisation

What are the conservation outcomes sought?

- 1 to reduce the cover of exotic species
- 2 to increase native plant cover and richness.

Implementation

You may not use or store fertiliser within the contracted area.

Take care when using fertiliser on land adjacent to the contracted area to prevent nutrient run-off or drift onto the contracted area.

Things to consider when preparing a bid

There should be no significant costs arising from restrictions on fertiliser use that would need to be included in your bid.

d) No removal or disturbance of native vegetation (alive or dead)

What are the conservation outcomes sought?

- 1 to retain habitat for native fauna
- 2 to provide seedstock for native regeneration
- 3 to provide protected areas for plants to regenerate
- 4 to improve soil condition.

Implementation

- Retain and do not disturb any native trees, shrubs, groundcover, standing or fallen dead wood.
- Native vegetation (dead or alive) must not be used for firewood or any other purpose.

Both living and dead standing trees must be retained. Standing dead timber is most often comprised of mature trees which provide ideal nesting sites for birds, mammals and reptiles in their well-developed hollows.

Logs and decaying timber provide important foraging sites and habitat for native animals, ground dwelling species and insects as well as providing sheltered areas for some native plants to grow. Fallen timber also traps moisture, nutrients and seeds and creates suitable conditions for regeneration.

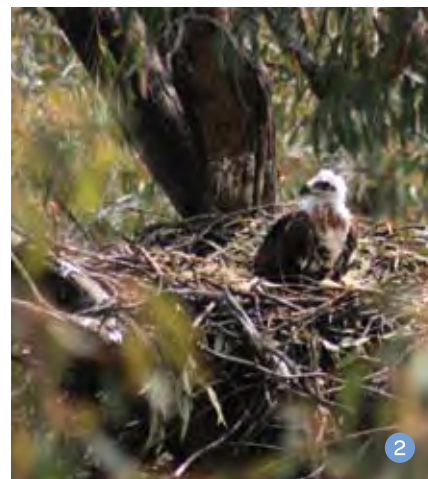
Fallen trees or branches should be left where they fall unless they block access to the contracted area, damage fencing associated with site management or they pose a threat to life, in which case they can be moved within the contracted area but in a way that minimises soil disturbance.

If your contracted area currently has a rabbit population, measures to restrict or eliminate them from the contracted area should be undertaken as soon as possible after entering a contract, to avoid fallen timber providing additional protection for these pests.

Things to consider when preparing a bid

If you currently use the standing or fallen timber from your contracted site for firewood (commercial or domestic), or for fence posts, you will no longer be able to if you enter into an Environmental Stewardship agreement.

When costing your bid you should consider the costs that these restrictions will impose on your farm business, either in terms of income foregone (current commercial firewood sales) or additional costs (e.g. buying strainers, buying firewood).



1 Reptiles benefit from standing trees
Photo: Graham Hodge

2 Young wedge-tailed eagle
Photo: Andrew Knop

3 Fallen timber provides a sheltered area
for plants to grow Photo: Graham Hodge

4 Leave tree branches where they fall
Photo: Graham Hodge

e) No planting of non-native species in the ecological community

What are the conservation outcomes being sought?

- 1 to maintain the ecological integrity of the community.

Implementation

In the course of managing a selected ecological community there will be times when replanting of vegetation may be a desirable management action. For example:

- after exotic species are physically removed they should be replaced with a native species to prevent the same or other exotics re-establishing
- it may be desirable to add to the understorey, mid-storey or overstorey depending upon the condition of the community.

Local provenance seed of native species that are indigenous to the area should be used for replacement planting wherever possible. Non-local provenance seed should only be used when locally sourced seeds are not available. Non-indigenous native species must not be introduced i.e. a native species that does not grow locally should not be introduced simply because it is a native plant.

Things to consider when preparing a bid

There are no issues arising from this requirement that would need to be included in your bid. Seed and seedling costs and related costs associated with re-vegetation work would come under the additional management package if these actions are agreed for your site.

f) No removal or disturbance of bush rock

What are the conservation outcomes sought?

- 1 to maintain habitat for native wildlife including reptiles, invertebrates, amphibians, small mammals (even bats), and ground-foraging birds.
- 2 to provide habitat for mosses and lichens and a number of smaller native plants, particularly in areas where grazing occurs
- 3 to reduce soil disturbance.

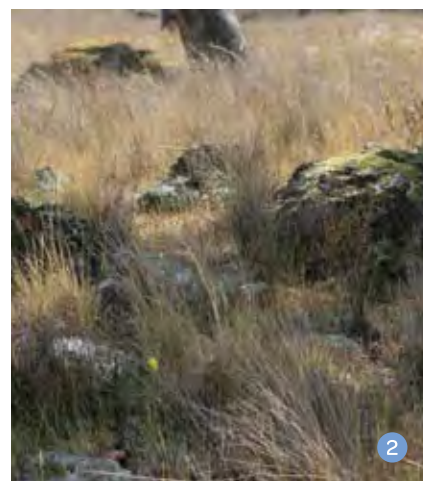
Implementation

If you currently have permission to sell bush rock from your contracted area, you will no longer be able to do so if you enter into an Environmental Stewardship agreement.

When undertaking management within your ecological community, care should be taken to minimise destruction or displacement of existing rock outcrops or surface rocks.

Things to consider when preparing a bid

If you are currently licenced to sell bush rock, when costing your bid you should consider the loss of current income arising from this requirement.



- 1 Replant using local native species
Photo: Andrew Knop

- 2 Bush rock and rocky outcrops are important habitat
Photo: Andrew Knop

g) No intentional burning outside of a management plan

What is the conservation outcome sought?

- 1 to maintain habitat structure and high quality habitat for reptiles and fire-sensitive plants.

Implementation

Fire is recognised as a legitimate tool for managing ecological communities when used as part of a regime of management actions to bring about a planned change in the condition of an ecological community. Fire may be an option recommended as part of the suite of additional management actions depending on the condition of your site.

However, ad hoc use of fire in the absence of a properly considered fire management plan developed in consultation with experts is not permitted under an Environmental Stewardship Agreement. Talk to your CMA about obtaining expert advice.

Fire can of course arise from lightning strike or from a bushfire through no fault of the land manager. If these circumstances arise, the land manager will not be considered to be in breach of this requirement.

Things to consider when preparing a bid

There are no issues arising from this requirement that would need to be included in your bid.

h) All other actions associated with legal obligations

What are the conservation outcomes sought?

Some conservation outcomes will be achieved outside of the influence of Environmental Stewardship. These outcomes will be achieved through Commonwealth, State and local government legislation that require land managers to undertake a certain minimum level of action to sustain the environment. Local government requirements on land managers to control or manage certain noxious weeds are an example.

Implementation

Land managers are expected to undertake these responsibilities using their own resources. State or local government officials, or your local CMA should be able to provide further information.

Land managers who are required to manage weeds listed as Weeds of National Significance (WONS), can attribute the whole cost to Environmental Stewardship. For a list of WONS see <http://www.weeds.gov.au/weeds/lists/wons.html>

Things to consider when preparing a bid

If you are required to manage a weed listed as a WONS you can include the complete cost of managing that weed in your bid.

If it is recommended that you undertake activities that go beyond the requirements imposed by State and local government regulations, you can include the difference between these costs and the cost of the additional requirement in your bid.

Depending on which ecological community you have, and what condition it is in, your field officer will recommend a package of additional management actions that you are encouraged to undertake. The metric tool will recommend, on the basis of high to low priority, actions from the list below based on the current condition of your site and assessed threats from both within and outside of the contracted area.

You will have the option of choosing which actions you undertake but, the more that you undertake from the list of recommended additional actions, the more likely it is that your site will improve in condition or maintain condition if already in very good condition. The possible additional actions are listed below.

Additional Management Package

Additional threat abatement and enhancement actions to be undertaken in the PMU

- monitor and manage herbaceous exotic plants (non-aggressive)
- monitor and manage herbaceous exotic plants (aggressive)
- monitor and manage exotic shrubs (aggressive)
- monitor and manage feral animals species
- monitor and manage native herbivores
- re-establish perennial native grass species
- plant overstorey tree species of the target community
- add coarse woody debris
- biomass control to reduce dominance of single native plant species
- re-establish understorey shrubs.

Buffering

- monitor and manage exotic herbaceous plant species (aggressive)
- monitor and manage exotic shrubs (aggressive)
- reduce wind borne agrochemicals
- reduce water borne agrochemicals
- reduce root disturbance.

Connectivity

- (Corridor option) No fertilisation, no cultivation and conservation grazing
- OR
- (paddock tree option) no fertilisation, no cultivation and fencing paddock trees 10 m from drip line.

These actions and what they entail are explained in more detail in the remainder of this chapter.

Additional management package: details

Additional management actions to manage threats to, and enhance the condition of, particular areas of the ecological community will be identified and ranked for importance by the metric used to score the site.

These additional actions are designed to further improve the ecological outcome over the life of a contract based on the existing condition of your site and the current threats to the site.

Some of the management actions in the following list appear as they do (e.g. aggressive versus non-aggressive herbaceous exotic plants) because of the way particular threats are assessed in the metric.

The field officer who visits your site will discuss with you the additional actions recommended for your site and it will be your choice to determine which of the management actions you will adopt from those presented. The more actions that you undertake from the recommended list the more likely you are to improve the condition of your site. However, each action comes with a cost and hence as a potential bidder in a competitive bidding process you will need to consider how you wish to structure your bid, which of course will be informed by the management actions you opt to undertake.

a) Monitor and manage herbaceous exotic plants (non-aggressive)

What are the conservation outcomes sought?

- 1 to reduce non-aggressive exotic plant cover, thereby reducing competition with native plants
- 2 to reduce non-aggressive exotic plant biomass
- 3 to create more gaps in the groundlayer to facilitate regeneration of native groundcover species.

Implementation

Herbaceous weeds, i.e. weeds that lack a woody stem, include species such as catsear, ribwort, onion weed, turnip weed, medics and clovers. They are non-aggressive insofar as they tend to grow in gaps between native plant species and are not prone to dominating in the form of large patches.

Control of non-aggressive exotic plants will be addressed to some extent through the use of *strategic grazing* involving the use of domestic stock over short spells in summer, autumn and winter. This would replace conservation grazing. Strategic grazing is responsive to rapid biomass accumulation of a single native species (e.g. Themeda sp.), or one or more exotic herbaceous species. It may be carried out within PMUs and BMUs.

Other targeted controls may also be considered, including localised application of herbicides (spot spraying, weed wiping), hand pulling or chipping of target weed species, mowing and slashing or possibly localised conservation burning (under an appropriate management plan and permission from relevant agencies as required).

Fodder should not be stored within, or introduced to any contracted PMU.

Things to consider when preparing a bid

If using herbicides to control non-aggressive herbaceous weeds you may wish to include the cost of the herbicide, any applicators or safety equipment and your time when pricing your bid. If chipping or hand pulling weeds you may wish to include in your bid price the cost of any tools and your time while fuel and wear and tear associated with mowing or slashing might be considered if you plan to use that method.



Forbs in understorey Photo: Andrew Knop



b) Monitor and manage herbaceous exotic plants (aggressive)

What are the conservation outcomes sought?

- 1 to reduce aggressive herbaceous exotic plant cover, thereby reducing competition with native plants
- 2 to reduce aggressive herbaceous exotic plant biomass
- 3 to create more gaps in the groundlayer to facilitate regeneration of native groundcover species.

Implementation

Herbaceous aggressive exotic plants include St John's wort, blue heliotrope, and serrated tussock and similar species that seed prolifically and become dominant in patches.

Control of aggressive herbaceous weeds may require strategic grazing, localised application of herbicides (spot spraying, weed wiping), hand pulling or chipping of target weed species, mowing or slashing, or possibly localised conservation burning (under an appropriate management plan). The options chosen will be governed by the State of the site, accessibility of the site and the overall need to minimise adverse impacts on perennial native species.

Things to consider when preparing a bid

If using herbicides to control aggressive herbaceous weeds when pricing your bid you may wish to include the cost of the herbicide (consider the likely number of applications), any applicators or safety equipment and your time. Similarly, if chipping or hand pulling you may wish to include the cost of any tools and your time in your bid price. If mowing or slashing there are fuel costs and wear and tear as well as your time that you may wish to consider. If burning are there any costs associated with ensuring that you have adequate fire protection measures in place to prevent the fire damaging adjoining land and if applicable, insurance cover?



St John's Wort is an aggressive herbaceous plant
Photo: Adam Muyt

c) Monitor and manage exotic shrubs (aggressive)

What are the conservation outcomes sought?

- 1 to reduce exotic shrub cover, thereby reducing competition with native plants
- 2 to reduce exotic shrub biomass
- 3 to create more gaps in the ground layer sward to facilitate regeneration of native groundcover species.

Implementation

Management actions for control of exotic shrubs include localised application of herbicides (spot spraying, weed wiping), hand pulling, localised conservation burning (if part of a management plan), mowing, slashing, and drill & fill with an appropriate herbicide. Strategic grazing may also assist. The management options chosen should reflect the current condition of the contracted area.

Those measures likely to have the least impact on native vegetation communities should be chosen for State 1 and high quality State 2 sites with other techniques reserved for State 3 sites.

When managing exotic shrubs in woodland environments land managers should consider the ecological role these exotic shrubs have as a mid-storey species, before removing them from a site. For example, in the absence of other mid-storey species in a woodland environment, exotic shrubs like boxthorn or blackberry may play a role as small bird habitat. In the absence of other mid-storey species the appropriate strategy may be to selectively kill these plants but leave them in-situ as other mid-storey native species are established.

Things to consider when preparing a bid

If using herbicides to control aggressive exotic shrubs when pricing your bid you may wish to include the cost of the herbicide (consider the likely number of applications), any applicators or safety equipment and your time. Similarly, if chipping or hand pulling you may wish to include the cost of any tools and your time in your bid price. If mowing or slashing there are fuel costs and wear and tear as well as your time that you may wish to consider. If burning are there any costs associated with ensuring that you have adequate fire protection measures in place to prevent the fire damaging adjoining land and if applicable, insurance cover?

d) Monitor and manage feral animals

What are the conservation outcomes sought?

- 1 to reduce browsing impact on palatable native plants
- 2 to maintain native species diversity
- 3 to reduce overgrazing leading to weed infestation
- 4 to improve litter and soil condition
- 5 to facilitate natural regeneration
- 6 to reduce predation on local native fauna.



Blackberry Photo: Graham Hodge



Implementation

Land managers are encouraged to control feral herbivores and carnivores (e.g. rabbits, hares, goats, deer, pigs, foxes, feral cats) where these are having a detrimental impact on the target ecological community through their contribution to total grazing pressure, predation or through soil disturbance. Control measures will differ between species and may include both preventative (e.g. fencing) and destructive measures as appropriate.

Destructive control measures should minimise unintended adverse impacts on non-target species and be undertaken humanely and in accordance with NSW legislation. Warren ripping to control rabbits within a target ecological community should be undertaken as a last resort and every effort should be taken to minimise soil disturbance away from the immediate warren site.

Things to consider when preparing a bid

Costs will vary between species to be controlled but some things that might be considered in preparing a bid include fencing costs, costs of removing watering points if necessary, time and labour/contractor costs, fuel, baits and traps.

e) Monitor and manage native herbivores

What are the conservation outcomes sought?

- 1 to reduce browsing impact on palatable native plants
- 2 to maintain native species diversity
- 3 to reduce overgrazing thus weed infestation
- 4 to improve litter and soil condition
- 5 to facilitate natural regeneration.

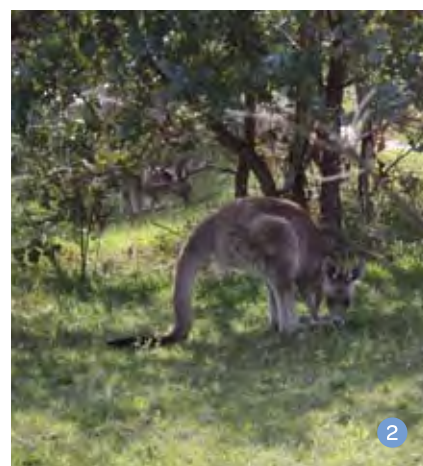
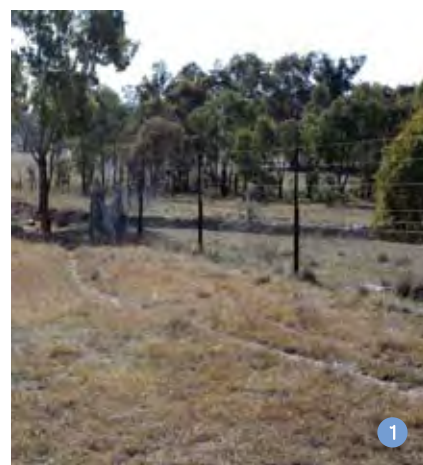
Implementation

Actions that involve reduction in the native herbivore numbers to reduce total grazing pressure include exclusion or culling. Exclusion of macropods (i.e. kangaroos) is best carried out with a 3-strand plain wire fence affixed to the top of a stock-proof fence.

Culling of native herbivores can only be conducted with the authorisation of and a license issued by the appropriate government authority. Ideally, culling should be coordinated with other similar actions in the region in order to maximise impact, and would be undertaken in a humane manner consistent with conservation and land stewardship values. Trapping and relocation is an option for native herbivores, but only under licence. Enticement away from the site (e.g. through strategic placement of watering points) is also an option, but success would need to be monitored.

Things to consider when preparing a bid

Some things that might be considered when preparing a bid include fencing costs, costs of removing watering points if necessary, time and labour/contractor costs, fuel and traps.



- 1 Fencing to control kangaroos
Photo: Graham Hodge
- 2 Kangaroos contribute to grazing pressure
Photo: Graham Hodge

f) Re-establish perennial native grass species

What are the conservation outcomes sought?

- 1 to enhance plant life-form diversity
- 2 to enhance vegetation structure
- 3 to increase 'nativeness'.

Implementation

The percentage of native grass species declines as ecological communities transition from their original state and native species are progressively replaced by exotic annual grass species, which are more suited to the changed nutrient status of the site.

One objective in managing a site for biodiversity outcomes is to reduce the nutrient status of the site and to return native perennials to the understorey. It is particularly important if weeds are physically removed from a site that a suitable native plant species be re-instated to avoid weeds re-colonising the site.

Re-instating native perennial grass species may be achieved by no-till or hand seeding following exotic plant control and/or fire. Land managers should use native indigenous species at all times and use local provenance wherever possible. Re-instatement of perennial native grass species is best undertaken after rain in warmer months.

If possible, it is preferable to collect seed from existing areas of native vegetation on the property, or from neighbouring habitats, taking care to not overly deplete the seed available.

The reintroduction of locally rare grasses is different from working with endangered or threatened species. Locally rare species may not be endangered, but as their name suggests, they may be difficult to find, due to a number of factors. Sourcing seed or propagules for these species will also be problematic, but successful re-establishment of otherwise rare species can be worth the effort. To maximise the chances of success, the reintroduction of locally rare species should take place only after exotic plants and other sources of competition have been eliminated, and where protection from grazing can be ensured. Specialist advice on replanting is available from your CMA and for box gum grassy woodlands from the DEWHA publication "A Guide to Managing Box Gum Grassy Woodlands".

Land managers wishing to replant, source or use threatened grasses (vulnerable, endangered and critically endangered) should discuss this with their field officer, as they will need to obtain a scientific licence under section 132C of the NSW National Parks and Wildlife Act 1974 in order to work with such grasses. A licence application can be obtained from the NSW Department of the Environment, Climate Change and Water (DECCW) website.

Things to consider when preparing a bid

When preparing your bid you may wish to consider your time and the cost of seed, ground preparation, other fencing, contract planters, herbicide and insecticide. Costs may depend on the nature of the terrain and whether broadcasting, using direct seeding or seedlings to re-vegetate a site.

g) Plant overstorey tree species of the target community (where applicable)

What are the conservation outcomes sought?

- 1 to enhance plant life-form diversity
- 2 to enhance vegetation structure
- 3 to restore degraded sites
- 4 to increase 'nativeness'.

Implementation

This management action applies to derived grasslands of the box gum grassy woodland and can be used in conjunction with removal of exotic plants to help prevent reinvasion. It requires planting or direct seeding with the dominant box gum grassy woodland eucalypt canopy species known to have occurred on the site using seedlings or seed preferably sourced from large contracted areas of existing native vegetation in the local landscape. It is advised that removal of exotic plants and soil disturbance be undertaken prior to planting or direct seeding, that tree guards be installed around seedlings, and that planting be undertaken in the warmer months using a 'natural' spacing layout (i.e. do not plant in lines or grids). Hand watering of seedlings may be required.



- 1 Planting overstorey species with minimum disturbance
Photo: Andrew Knop
- 2 Re-establishing overstorey species in box gum derived grassland
Photo: Adam Muyt

Things to consider when preparing a bid

When preparing your bid you may wish to consider the cost of tubestock/seed, tree guards, ground preparation, stakes, other fencing, contract planters, herbicide and insecticide. Costs may depend on nature of the terrain and whether broadcasting, using direct seeding or seedlings to re-vegetate a site.

h) Add coarse woody debris

What are the conservation outcomes sought?

- 1 to provide habitat for ground-dwelling fauna
- 2 to provide protected areas for plants to regenerate
- 3 to improve soil condition.

Implementation

Coarse woody debris (logs and sticks) provide important foraging substrate for native fauna (e.g. brown tree creeper, bush stone-curlew and grey-crowned babbler), and a sheltered micro-habitat for grazing-susceptible plants to germinate and grow. Where coarse woody debris is sparse or absent on a site, supplementation may be undertaken through placement of untreated fence posts, sleepers or other rural salvage timber. Relocation of coarse woody debris from native woodland located off-site should not be considered, unless it is part of recent council thinning or logging operations. Care should be taken not to introduce timber containing exotic insects or fungi to the site. If in doubt ask the CMA about obtaining expert advice.

Things to consider when preparing a bid

When constructing your bid you may wish to include your time and any costs associated with transporting old fence posts, sheep yard railing or similar coarse woody products to the site, or if local government has removed trees for road construction nearby, transporting it to the site.

i) Biomass control to reduce dominance of single native plant species

What are the conservation outcomes sought?

- 1 to reduce biomass of overly dominant species
- 2 to enhance native plant life-form richness
- 3 to enhance vegetation structure
- 4 to improve soil health
- 5 to reduce fire hazard.

Implementation

Biomass control is employed to reduce the biomass of an overly dominant native plant species, to promote regeneration of native species, to improve native plant life form richness and to improve soil health.

Biomass may be controlled through slashing or mowing at an agreed timing and frequency to produce the desired management outcomes. Strategic grazing involving the use of domestic stock in short spells in summer, autumn and winter is the preferred method for large areas. Small-scale experimental burns may be considered for small areas (e.g. <5 ha), but land managers are requested to obtain expert advice and have a management plan in place before burning.

Things to consider when preparing a bid

Biomass control is not something that would need to be undertaken every year – only when the perennial native grass cover becomes dense enough to restrict the growth of forbs and herbs and results in an understorey that is too uniform in structure.

In terms of costing your bid, you may wish to consider if there are any specific costs associated with the biomass control options identified above. For example, do you have adequate insurance cover if you are using fire as a tool, are there any costs associated with having fire trucks on hand when you burn, are there costs associated with slashing such as fuel or your time?

j) Re-establish understorey shrubs

What are the conservation outcomes sought?

- 1 to enhance plant life-form diversity
- 2 to enhance vegetation structure
- 3 to increase 'nativeness'.

Implementation

This management action is applicable within the weeping myall woodland community where native shrubs are sparse or absent. It requires planting or direct seeding with shrub species known to occur on the site using seedlings or seed preferably sourced from patches of existing native vegetation in the local landscape. It is advised that removal of exotic plants and minimal soil disturbance (where necessary) be undertaken prior to planting or direct seeding, that tree guards be installed around seedlings, and that planting be undertaken in the warmer months using a 'natural' spacing layout (i.e. do not plant in lines or grids). Hand watering of seedlings may be required.

Buffering

For the first time, Environmental Stewardship, through the MEC Project, is offering land managers the opportunity to manage a buffer around PMUs with a view to improving the overall ecological viability of these areas. It may be important that very small PMUs be buffered to reduce threats arising from adjacent land use such as fertiliser drift and/or nutrient run-off, spray drift or direct physical damage to plant roots as a result of cultivation of adjoining land.

Buffer areas, where they are offered by land managers will require active management but the level of management and the width of the buffer may vary according to the type of threat to the PMU. Threats to the PMU will be assessed by the field officer at the time the PMU is assessed. Depending on the threats identified, and the importance of a buffer to improve the condition of the PMU, recommendations for the management of a buffer may be identified by the metric during site assessment.

The required actions are described below. Please note, where the prescribed management actions for the buffer are the same as those prescribed in the Additional Management Package described previously, they are not described again in the section below.

Required Management Actions in buffers

- a) Monitoring and managing exotic herbaceous plant species (aggressive)- **described previously**
- b) Monitoring and managing exotic shrubs (aggressive) – **described previously**

- c) Reduce wind borne agrochemicals
- d) Reduce water borne agrochemicals
- e) Reduce damage to tree roots.

c) Reduce wind borne agrochemicals

What are the conservation outcomes sought?

- 1 to prevent enrichment of soils in PMU
- 2 to prevent microbial impacts associated with chemical spray drift.

Implementation

The characteristics of the buffer will determine how effective it is in reducing the impact of wind borne agrochemicals. For example a buffer with trees and a good understorey of native grasses is likely to be more effective than one without trees or a native grass understorey in trapping wind borne particles. Accordingly, a BMU with trees and native understorey that is managed in a way that will conserve and possibly lead to further natural regeneration, is likely to fully abate the threat in fifteen years whereas one without these characteristics, or where these characteristics are not being actively managed, may not be as effective.

If buffering is recommended to reduce the threat posed by wind borne agrochemicals to the PMU there are two management options available, both of which apply to a buffer width of 150 metres:

- 1 no fertilisation, no cultivation and no spraying of agro-chemicals in the buffer, regardless of whether the buffer contains trees. If trees are present (i.e. 30% or more of the buffer is comprised of scattered trees) this option is less likely to achieve the long term condition improvement outcomes than option 2 because the long term viability of the trees is not being actively managed
OR
- 2 if the buffer zone contains trees, (i.e. 30% or more of the buffer is comprised of scattered trees) no fertilisation, no cultivation and no spraying of agrochemicals, PLUS fostering regeneration of paddock trees and native perennial grasses through:
 - a. Conservation Grazing, or
 - b. Protecting individual paddock trees within the buffer zone by fencing sufficient to allow natural regeneration.

Things to consider when preparing a bid

When preparing a bid the opportunity cost of utilizing otherwise productive land as a buffer and the cost of fencing and other materials and labour could be considered depending on the management approach adopted.

d) Reduce water-borne movement of agrochemicals

What are the conservation outcomes sought?

- 1 to prevent enrichment of soils in the PMU
- 2 to prevent microbial impacts associated with water borne agrochemicals.

Implementation

Land managers are encouraged to establish a dense sward of native perennial grasses within a buffer adjacent to the PMU to reduce the water-borne movement of agrochemicals from adjoining agricultural land into the PMU. This would be achieved by cessation of fertilisation and cultivation, and would target a 20 m buffer immediately adjacent to the PMU.

Things to consider when preparing a bid

When preparing a bid the opportunity cost of utilizing otherwise productive land as a buffer and the cost of fencing and other materials and labour could be considered depending on the management approach adopted. Costs of controlling exotic plants may also be considered.

Reduce disturbance to tree roots

What is the conservation outcomes sought?

- 1 to improve tree health by minimizing disturbance to tree roots.

Implementation

Land managers are required to cease cultivation within a 20 metre buffer immediately adjacent to those PMUs that are wooded.

Things to consider when preparing a bid

When preparing a bid the opportunity cost of utilizing otherwise productive land for conservation outcomes could be considered.



Tree roots may be damaged by cultivation of adjacent land. Photo: Simon Attwood



Connectivity

In order to further enhance the habitat potential of target ecological communities on private land, Environmental Stewardship, through the NSW MEC Project is offering land managers the opportunity to manage Connectivity Management Units (CMUs) linking their nominated ecological community site with the surrounding landscape. A CMU is an area of previously grazed land managed to promote connectivity between a PMU and other patches of native vegetation and may be recommended by the metric tool where isolation is assessed as a threat to the viability of a PMU.

What is the conservation outcome sought?

- 1 to encourage natural regeneration of native canopy species, and thus long-term performance of functional corridors in reducing isolation of remnant communities

Implementation

Land managers who opt to manage a CMU in association with their nominated ecological community will be required to manage the nominated CMU in order to maximise natural regenerative capacity of native trees and shrubs. Where grazing is practiced, standard grazing practices will be replaced by conservation grazing. Alternatively, individual paddock trees may be fenced sufficient to allow natural regeneration i.e. the area around the tree is protected from livestock grazing and trampling to encourage germination of tree seedlings following seedfall. Soil preparation measures may be undertaken to increase the likeliness of seedling strike, and seeds themselves may be collected and dispersed to encourage regeneration.

Things to consider when preparing a bid

Land managers considering this option would need to consider the opportunity cost of managing their nominated corridor for conservation as opposed to production outcomes as well as the costs of fencing and materials that will be required to manage grazing (where applicable), in accordance with project requirements.



Individual paddock trees should be given the opportunity to regenerate
Photo: Graham Hodge



08

Conservation Value Measure

What is the Conservation Value Measure?

The Conservation Value Measure (CVM) is a computer-based decision support tool (often referred to as a metric) that allows a score to be allocated to the area of a targeted ecological community for which a bid is to be prepared and which will be managed if the bid is successful.

A new CVM has been developed for the MEC Project that will allow comparison between the three target ecological communities in New South Wales in 2010-11.

What makes up the Conservation Value Score (CVS)?

Each property receives a score which is calculated by the metric tool.

The metric tool builds a score based on the condition and state of the proposed area of the target ecological community at the time of the site assessment. The condition is derived from comparison with the State and Transition Model for that ecological community. This occurs during the course of the site assessment.

The field officer will identify the threats to the ecological community in the proposed area. Threats are divided between internal and external. Internal threats are those that can be managed in the area itself. External threats include the impacts of activities external to the ecological community (such as damage to roots by cultivation adjacent to area and the threat of ecological isolation).

Based on these identified threats, the metric tool specifies what management actions will be needed to abate the identified threats in order to maintain the ecological community in its current state and any additional management that could enhance its condition to a higher state. The additional management actions that you agree to undertake, including managing buffer and/or connectivity areas as appropriate are entered into the metric tool which calculates the site score (an expected per hectare ecological value of the site in 15 years time). If there are multiple areas of the ecological community or communities being offered, the scores for each of these are aggregated to form the score for the property.

Conservation Value Index

When the Conservation Value Score for a site is divided by the land manager's bid price a value is calculated known as the Conservation Value Index (CVI). Every participating bid will have its own Conservation Value Index. In the evaluation process, all bids are ranked according to their individual CVI from highest to lowest in a value for money continuum.

09

Developing a bid

In order to bid in the Multiple Ecological Communities Project you will need to complete a bid application form that the field officer will provide you after site assessments have been completed and a management plan agreed.

As discussed in Chapter 7, there are both active and passive management activities that land managers are required and/or may opt to undertake to restore their ecological community. The Australian Government does not expect to incur substantial costs for passive management that predominantly maintains the status quo such as retaining standing timber, bush rock or fallen timber. However, it is prepared to cover the cost of profits foregone by a business because of adopting these practices, where the total bid price provides value for money.

On the other hand, active management activities can be more expensive to do and the Australian Government is prepared to consider realistic payment for these activities, including any associated costs for lost profits, where such payments provide relative value for money. Active management includes activities such as fencing to control total grazing pressure, weed control, re-planting of native vegetation, re-location of watering points and feral animal control.

Additional costs that you may consider in your bid include:

- the cost of public liability insurance required under the agreement
- any costs to undertake monitoring
- any cost associated with obtaining a covenant.

You will need to cost your own bid and are advised to consult your financial advisers and service providers in doing so. It is important that you cost your bid accurately, to account for the full costs of implementing the management plan to improve the ecological community on your land over the life of the project. Accurate costing includes considering potential changes to the Consumer Price Index, which will affect your costs over the duration of your contract.

Please be aware that neither field officers, the Delivery Agent nor the Australian Government will provide you with advice on the actual costing of your bid.

In previous Environmental Stewardship rounds land managers asked if there was a standard price for them to charge for conserving ecological communities on their property. The fact is that there is no standard price. Each land manager manages a site with particular characteristics. Some land managers will do work themselves at their own expense, others will wish to contract the work. Some sites will be more degraded than others.

But this does not mean that the component parts of a bid cannot be sensibly priced. You are encouraged to get advice if you are unsure.

Each bidding round establishes its own market and successful bids will cover a range of prices.

Bid Preparation

Bid applications will only be accepted into the final evaluation if they are posted before the nominated closing date. You should make every effort to complete and post your bid application form so that it reaches the tender box before the closing date.

Step 1: The entity making the bid should be the same entity that signed the Request for Site Assessment

Begin your bid preparation by checking that the bid form has been pre-filled with your correct entity details. If there are any errors, advise the field officer of required amendments. The entity that completes the bid application form will also be the entity contracted, if your bid is successful.

Step 2: Pricing a bid

Please note: it will be entirely up to you to determine the price that you require to undertake the agreed management actions. Neither the field officers nor the Delivery Agent will be aware of what constitutes a successful bid and will therefore be unable to provide advice on this.

An adverse result for the Australian Government, and for you, would be if you under-priced your bid in order to obtain a competitive advantage over other participating land managers in the bidding process and then could not meet your contractual obligations.

Payments are conditional on meeting these obligations.

In developing a bid, it will be important to consider the various costs that may be incurred throughout the life of the agreement taking into account the matters identified in Chapter 7, which are summarised below. You should think about:

- labour costs, including your own
- material costs. For example fencing materials, herbicides, pest and weed control, re-vegetation and replanting, costs associated with equipment required to undertake on-ground management activities
- the costs of seeking specialist advice relating to: contractors, weed and pest advisers, personal financial advisers, solicitors, accountants or agricultural product suppliers over the life of the contract
- costs associated with stock exclusion, such as alternate water sources or establishing alternative stock shelter, for example a strip of trees or man-made structure
- loss of income arising from restrictions on the use of the target ecological communities for production or other income generating purposes, eg reduced carrying capacity or cost of firewood, etc
- consider financial issues that may arise over the timeframe of the agreement e.g. inflation risk over the period of the agreement.
- any costs associated with establishing a covenant on the site if one is proposed
- time and costs associated with the monitoring and reporting requirements and the labour and equipment that might be required
- cost of public liability insurance required under the agreement.

Please note:

The Australian Government expects that for each year that an agreement is sought, there will be a corresponding request for annual funding. So, if a fifteen year agreement is sought, there will be fifteen annual instalments requested in your bid. A fifteen year proposed agreement with only ten years of funding is not acceptable.

Furthermore, the Australian Government will not support bids that require the majority of the funding in the early years of the contract. The expectation is that there will be a relatively even distribution of funding across the life of the contract. As a rule of thumb, no more than 25% of the total funding sought should be requested in the first three years.

Land manager benefits

Land managers in determining a bid price may also consider the benefits they can gain from participation in the Multiple Ecological Communities Project. These may include:

- improved biodiversity, soil health, and water quality on the property
- improved habitat for wildlife – native birds, animals and flowers
- improved stock and land management
- increased aesthetic values of the property
- personal enjoyment and satisfaction from having made a positive impact on the local natural environment
- helping to better link private land conservation efforts across the catchment to help address important conservation issues.

Establishing the final price

After considering the costs of implementing all agreed management actions over the length of the agreement, you may consider the extent to which you are prepared to absorb a proportion of the costs yourself for the private benefits you will receive.

Once the bid application has been completed and the document signed and submitted there will be no further opportunities to renegotiate the agreed management actions or the price before the bid is assessed. However you are able to withdraw at any time before an agreement is signed. Once an agreement is in place and management actions have commenced, there will be some flexibility for both parties to review and adjust actions, within the available budget, in light of progress and other issues.

Please note

It is important that you check your bid thoroughly before submitting it to ensure that:

- a) you have included all the costs that you expect to incur over the life of the agreement and that you are comfortable with the pricing of these items
- b) your arithmetic is correct and the annual costs add up to the total cost given
- c) the number of annual payments sought is consistent with the duration of your agreement, i.e. if a fifteen year agreement is sought, there should be fifteen annual entries on the bid form
- d) there is a relatively even spread of funding over the life of the contract.

10

The bid evaluation process

An independent probity adviser is present at all bid evaluations and all bids are coded to ensure anonymity.

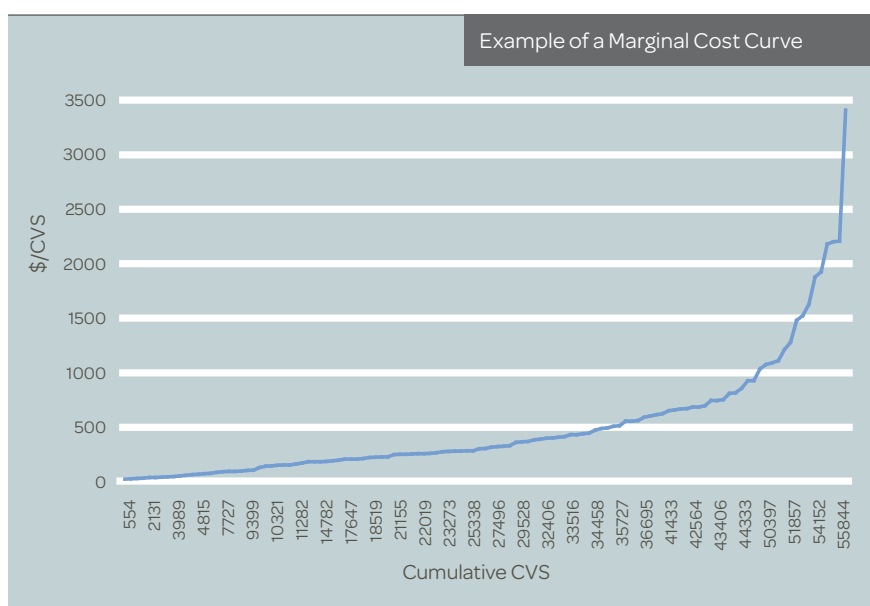
The bidding process is a competitive tender, so your bid will be compared to the bids of other land managers wanting to participate in the Project.

All bids are ranked according to their CVI from highest to lowest in a value-for-money continuum.

The ranked bids are used to generate a marginal cost curve, where best value-for-money bids are on the lowest part of the curve on the left, and lower value-for-money bids are on the higher part of the curve on the right.

The point at which the curve significantly increases in gradient is the point at which the marginal cost of purchasing an additional conservation unit increases significantly and on a value-for-money basis bids above this cut off point are unlikely to be recommended.

However, other parameters such as the total bid price, dollars per hectare sought per year, the available project budget and the spread of bids across target communities may also be used to determine the final composition of recommended bids.



Ministers acting jointly as the NRM Board receive the evaluation panel's list of anonymous recommended bids and make the final decision on which bids are funded.

Bids from the New South Wales and South Australian rounds may be compared by the Panel if required to establish a representative distribution of funding across target communities and States.

Successful bids

If successful, you will be offered a contract with the Australian Government. You will receive a copy of the contract template with your bid form so you can discuss it with your legal advisers if you want to. The contract will require you to carry out the agreed management actions and submit annual reports in order to receive yearly payments for the life of the contract.

Payment

If your bid is successful, you can anticipate payment before 30 June 2011. Payment will be made after your contract is signed by the Department (the last party to sign).

Unsuccessful bids

The bid round is a competitive tender process – so not all applications will be successful. If a bid is unsuccessful it is likely that the quality of the proposal as it relates to the bid price was not as competitive as others were in the bid round. It certainly does not mean that a site does not have conservation value.

It should be noted that the Environmental Stewardship Program ends in June 2011 and no further tender rounds are planned. **If you are contemplating participation in the MEC Project you are advised to participate in the current round.**

Monitoring and evaluation

A key part of the Multiple Ecological Communities Project is monitoring and evaluation to assess whether funded projects are maintaining and/or improving the condition and extent of the target ecological communities, in addition to other desired outcomes as described in the Environmental Stewardship Strategic Framework.

Land manager monitoring and evaluation

If you have a contract under the Multiple Ecological Communities Project, you will be required to complete simple annual monitoring and evaluation reports.

You will be asked to record information in a template provided and submit it as part of annual reporting arrangements. As part of these reporting arrangements, you will also be required to complete a simple acquittal of funds received.

A field officer will assist with the set up of monitoring sites, including the site markers, and go over the reporting process, once a contract is in place. A monitoring information kit will be given to you to assist you with the monitoring and evaluation reporting requirements.

A further fact sheet on monitoring requirements will be provided to you before you have to develop your bid.

Other monitoring activities

From time to time you may be asked to participate in more formal monitoring or survey activities being conducted in association with Environmental Stewardship. It will be a condition of your contract to grant site access for this work, if selected as one of the study properties. These surveys will have no cost implications for you.

You will be contacted well in advance and appropriate arrangements will be made to ensure any visits happen at a convenient time for you. All information gathered during these surveys and assessments will be made available to you.



Bearded dragon *Photo: Simon Attwood*



12

Covenanting your site

You are invited to consider entering into an in-perpetuity conservation covenant to protect your site. **Please note: only land owners can enter into a conservation covenant.**

What are conservation covenants?

Conservation covenants are voluntary agreements negotiated between a land owner and the relevant covenanting authority to protect and manage land of high conservation value for conservation outcomes. Conservation covenants are recorded on the title of the land and they usually restrict, for the duration of the covenant, particular actions or types of land use that would degrade the conservation value of the land. As covenants are recorded on title, they remain in effect if the land is sold.

The Australian Government would like to ensure that its investment through the Multiple Ecological Communities Project, and the conservation benefits arising from it, are secure. Accordingly, the Australian Government encourages you to consider perpetual covenants over all or some of your site if your bid is successful. Because perpetual covenants are highly valued by the Australian Government, if you offer a perpetual covenant you will receive significant additional weighting when the Conservation Value Score for your site is being calculated.

Why should a land owner consider making a perpetual covenant commitment on their Ecological Community?

By entering into a perpetual covenant you are ensuring that future generations will be able to benefit from the protection of the biodiversity and the continuation of essential ecosystem services, which are important for landscape productivity, even if you leave the property.

If you enter into a covenant you may also gain access to ongoing support and a network of other land managers using covenants for conservation and land management.

You may also wish to contact your local council, as many local governments offer rate concessions and other incentives to covenant holders.

A comprehensive fact sheet relating to covenanting options for participants in the NSW Multiple Ecological Communities project is being developed and will be made available separate to this publication.



Protect habitat in perpetuity *Photo: Andrew Knop*



13

Taxation of payments under the Multiple Ecological Communities Project

There are tax implications for landowners who receive Multiple Ecological Communities Project payments.

It is a good idea to seek independent financial advice before submitting a bid under the Project. It is also sensible to discuss whether to enter into a conservation covenant with other family members. Every landowner's situation is different and you need to make sure it is the right thing for you.

Are payments subject to income tax?

All Multiple Ecological Communities Project payments are subject to income tax.

Are there any special income tax concessions available for conservation covenants?

Yes. Some conservation covenant programs are approved under the *Income Tax Assessment Act 1997*. This means that if you enter into a perpetual conservation covenant and do not receive any money, property or other material benefit, you may be allowed a special income tax deduction.

Not everyone is eligible for this concession. We recommend that you talk to the Australian Tax Office (ATO) and/or seek financial advice to see if they meet the eligibility criteria.

Further information about this concession can be found on the ATO website on conservation covenant concessions: www.ato.gov.au/content/19507.htm or by phoning the ATO on 13 28 66

Are there capital gains tax implications?

Yes. If land owners enter into a conservation covenant, there are capital gains tax implications, whether or not they receive any money, property or other material benefit on entering the covenant.

Do the capital gains tax concessions also apply?

Yes. If a landowner makes a capital gain under the conservation covenant, the general capital gains tax discount also

applies unless the covenant is entered into by a company that owns the land. If the land owner meets certain other criteria, the capital gain may be further reduced by other capital gains tax concessions including the:

- small business 15 year exemption
- small business 50% active asset reduction
- small business roll-over
- small business retirement exemption.

For more information about capital gains tax please talk to the ATO or see their publications *Guide to capital gains tax* and *Guide to capital gains tax concessions for small business*.

Key contacts

Conservation Covenants – Income Tax deductions and CGT concessions

Australian Taxation Office

Phone 13 28 66
 Email npc-nationaloffice@ato.gov.au
 Web www.ato.gov.au (type 'Conservation Covenants' or 'small business concessions', as appropriate, into the search field)

Conservation covenants – tax incentives

Department of the Environment, Water, Heritage and the Arts

Email ciu@environment.gov.au
 Web <http://www.environment.gov.au/biodiversity/publications/fact-sheets/incentives.html>

Valuation of property

Australian Valuation Office, Philanthropy Program

Phone 02 6229 3420 or 08 8218 9008
 Web www.avo.gov.au

14

Stewardship payments and Centrelink

Land managers who successfully take part in the Australian Government's Multiple Ecological Communities Project will receive financial assistance. The payment will be paid annually for the length of the contract, which can be up to 15 years.

Will the Multiple Ecological Communities Project payment affect your Centrelink payments?

Centrelink will treat the payments as income. This means that it may affect any Centrelink assistance you are currently receiving. This includes Drought Assistance. It is important you let Centrelink know if you start receiving this annual payment. This is to make sure you are paid the correct amount.

For more information please contact Centrelink's Farm Assistance Line on: **FREECALL™ 1800 050 585**

or visit the website at:
www.centrelink.gov.au

Are there tax implications such as concessions or deductions?

Yes. Participating landowners may be eligible for capital gains tax concessions and income tax deductions.

For more information regarding the tax treatment of these payments you can:

- refer to Chapter 13 of this booklet on Taxation of Payments under the Multiple Ecological Communities Project;
- phone the ATO on: **132 866**;
- visit the website at: www.ato.gov.au; and/or
- consult your accountant.

How can I find out more about the Multiple Ecological Communities Project?

Elsewhere in this booklet you will find essential information about the Project and about Caring for our Country – Environmental Stewardship.

For further information about Environmental Stewardship:

- Visit the Australian Government website at: www.nrm.gov.au/stewardship, or

Disclaimer – The information contained in the publication is intended only as a guide. The information is accurate as at April 2010, but may change.



Goodenia
Photo: Matt White

15

Frequently asked questions and answers

What if I am not sure if I have one of the target ecological communities on my property?

Chapter 4 will help you to determine if you have one or more of the target ecological communities on your property. If you are still unsure please submit a Request for Site Assessment form and a field officer will contact you to discuss.

What if I am not sure whether I want to be involved in the Multiple Ecological Communities Project?

Involvement in the Project is voluntary and submitting a Request for Site Assessment form is not binding. There are no penalties for deciding not to go ahead. At any time prior to signing the contract, you can decide not to continue.

Are there any rules relating to applications on leasehold land?

Lessees are entitled to participate in the Project provided the following conditions are met:

- the lease is for at least as long as the period of the proposed agreement
- the conditions of the lease do not prevent any of the proposed activities or actions to conserve an area of the ecological community on the land

- you have written authority from the owner of the land to enter into a contract with the Australian Government.

What will I need to do if, after signing a contract my circumstances change and I wish to sell my land?

The contract does not prevent you from selling your land. However, the contract requires that you inform the Australian Government about any changes in land ownership that may occur within the contract period. This allows the Australian Government to discuss the option of the potential buyers taking over the contract.

Can I submit a bid to manage a site under this Project if I already receive assistance to manage a site?

If you are currently receiving funding support from any source for conserving the target ecological community on your nominated contracted area then you cannot bid through this Project for the same contracted area. If your site is currently covenanted see Chapter 2 of this booklet for further information on conditions that apply.

When should I start consulting financial advisers and others about my bid?

If you think you are likely to proceed with a bid you should start seeking advice early. This could help you with costing the management activities you want to carry out for inclusion in your bid price. Fencing contractors and suppliers of herbicides or plant seedlings may be able to assist with costing some of the physical activities you might undertake. If, in order to manage an area of ecological community, you will incur some loss of income due to altering or stopping a current land use, you may include this cost in your bid price. For assistance in assessing these costs, you may wish to talk to your accountant/ financial adviser.

You should also check with your financial adviser or the Australian Tax Office (ATO) regarding the possible taxation implications of your proposed bid and may wish to contact Centrelink about any impacts on your Centrelink entitlements.

Please see chapter 13 on Taxation, and chapter 14 on Stewardship payments and Centrelink. You may also wish to consult a legal adviser regarding your obligations under the agreement you will sign with the Australian Government if your bid is successful.

Can I submit more than one bid?

You can submit one bid for each property you own, so land owners who have more than one property can submit one bid for each, if eligible.

What happens if a natural event affects the ecological community I am contracted to manage?

The Australian Government recognises that from time to time significant natural events such as floods, droughts, bushfires or storms severely impact on natural resources. For this Project, these impacts are seen as beyond the land manager's control. In this event the individual contract terms will be reviewed.

What happens if I cannot meet my obligations in the contract in the agreed timeframes?

If you cannot meet your obligations within agreed timeframes, you need to let us know as soon as possible. The Australian Government will then consider the circumstances and discuss an appropriate way forward. These may include revising management actions, an extension of timelines or termination of the contract.

Will I be audited?

Yes, you can expect to be audited over the life of the contract. When you are subject to audit you will be contacted in advance and appropriate arrangements will be made to ensure any visits happen at a mutually convenient time for you and the auditor. The Stewardship Program anticipates independently auditing a representative sample of contracts each year.

Is the income received through the Project subject to income tax?

Yes. Payments received under the Project are subject to income tax. See chapter 13 for further information.

Will this income affect my eligibility for drought assistance or any other Government assistance?

Possibly. If you have any concerns about these matters, we suggest you talk to your financial adviser or Centrelink. See Chapter 14 for a broad understanding of these matters.

How long do I need to sign up for? Can I change my mind about the length of the agreement?

Agreements will be for a minimum of 10 years, and maximum of 15 years depending on the current condition of your sites. The length of the contract that you offer is reflected in the score for your site and hence should not be changed after you have confirmed your draft management plan with your field officer.

What will be my reporting requirements?

You will be required to submit an annual report on your progress implementing the agreed actions, as outlined in the agreement. The reporting requirements will be simple.

Successful bidders under the Multiple Ecological Communities Project will be required to develop an implementation plan setting out how and when they intend to undertake agreed management actions on their site over the first five years of the contract and submit it with their first annual report. After five years a further implementation will need to be developed.

Will the Australian Government or researchers require access to my property?

The Australian Government and service providers employed by the government may need access to your property from time to time. These visits may be to conduct a periodic audit or to conduct ecological surveys to build a scientific understanding of the Project's achievements. If access to your property is required, the Australian Government, or an authorised representative, will:

- contact you and arrange a mutually suitable time
- not enter your land without you or your representative present
- respect and comply with your reasonable safety and security procedures.

If endangered species or noxious weeds are found on my property will that affect how I am allowed to farm my property?

Noxious weeds are your responsibility under existing state and federal laws. The cost of managing other weeds that may compromise the value of the target ecological community can be included in your bid, as can the management of weeds listed as Weeds of National Significance (see Chapter 7).

Any discussions about management options will be only for the areas you nominate and may affect how you farm this area. No inspection will be made of other areas of the property.

The *Environment Protection and Biodiversity Conservation Act 1999*, or EPBC Act, is Australia's national environment law, and protects matters that are of national environmental significance. These matters include nationally threatened species and threatened ecological communities, among others. The EPBC Act requires that land managers do not undertake any new actions, such as vegetation clearing that will have a significant impact on a matter of national environmental significance without first getting approval from the federal environment minister.

Land managers should be aware of these requirements, as sites funded under the Multiple Ecological Communities Project, if not already meeting the listing criteria, may meet the listing criteria after fifteen years of stewardship. Further information about the EPBC Act is available at www.environment.gov.au/epbc.

A recent publication, especially for farmers titled, "Farming and the national environment law", is available at: <http://www.environment.gov.au/epbc/publications/pubs/farming-epbc.pdf>

Has the Australian Government run this sort of project before?

Yes. The Australian Government has run five previous rounds of Environmental Stewardship targeting box gum grassy woodland in the Lachlan, Murrumbidgee, Central West, Namoi and Border Rivers-Gwydir Catchment Management Authority regions in New South Wales and in the Condamine, Border Rivers-Maranoa-Balonne and South East NRM regions in Queensland. The Australian Government has also run similar projects such as BushBids in South Australia and the Forest Conservation Fund in Tasmania. These projects were also market-based initiatives. More information on some of the Australian Government's previous market based projects can be found at: www.marketbasedinstruments.gov.au

What happens after my agreement ends? Can I sign-up again?

Agreements under the Multiple Ecological Communities Project can be for up to 15 years. At this stage, it is not possible to say what the Australian Government may offer beyond the end of individual agreements.

What are the implications for participation in future carbon credit schemes?

If you sign an agreement under the Multiple Ecological Communities Project you will, subject to the criteria surrounding carbon credits, be able to use the site to participate in a carbon credit scheme in the future.

If I miss out this time can I apply another time?

It should be noted that the Environmental stewardship Program ends in June 2011 and no further tender rounds are planned. If you are contemplating participation in the MEC Project you are advised to participate in the current round.

Will I be able to clarify my understanding of the project before submitting a Request for Site Assessment?

Yes. The Delivery Agent in association with the Environmental Stewardship Section will be conducting information sessions during the Expression of Interest phase of the project to discuss information in this booklet and clarify questions you may have.



Blue flax lily Photo: Paul Ryan

© Commonwealth of Australia 2010

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney General's Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or posted at www.ag.gov.au/cca

Disclaimer

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the Australian Government or the Minister for Environment Protection, Heritage and the Arts, the Minister for Climate Change and Water or the Minister for Agriculture, Fisheries and Forestry.

While reasonable efforts have been made to ensure that the contents of this publication are factually correct, the Commonwealth does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this publication.

Printed on recycled paper



CARING FOR OUR COUNTRY

NSW Multiple Ecological Communities Project

For further information, please contact the Central West CMA – the program's NSW delivery agent.

Phone 1800 447 371
Email mec@cma.nsw.gov.au
Post Central West CMA
PO Box 227
Wellington
NSW 2820

Environmental Stewardship
www.nrm.gov.au/stewardship

