Carbon + Biodiversity Pilot

Planting Protocol: North Central NRM Region (Victoria)



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Acknowledgement of Country

We acknowledge the Traditional Owners of Country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders past, present and emerging.

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Introduction

This document details the eligibility, design, establishment and maintenance conditions that apply to environmental planting projects under the Carbon + Biodiversity Pilot Program (C+B Pilot). It is intended to complement the program guidelines available on the <u>C+B Pilot website</u>.

The conditions that apply to projects in the North Central Natural Resource Management (NRM) region are contained in Tables 1-4 below in the third column, titled 'C+B Pilot conditions – North Central (Vic)'. The conditions fall into two categories: mandatory (expressed in the tables as 'must') and recommended (expressed as 'should'). All projects must comply with the mandatory conditions. Compliance with the recommended conditions is not mandatory. Words and phrases in italics have defined meanings, which are provided below the first usage of the relevant word or phrase and in the Glossary below the tables.

Further advice on any of the conditions listed here can be obtained from the Department of Agriculture, Water and the Environment, at <u>agstewardship@awe.gov.au</u>.

To assist proponents, relevant requirements that apply to environmental planting projects under the Emissions Reduction Fund (ERF) are provided in the second column, titled 'Emissions Reduction Fund requirements'. For more information on ERF eligibility visit the <u>Clean Energy</u> <u>Regulator's website</u>. For information on the environmental plantings method under the ERF click <u>here</u>. You can also contact the Clean Energy Regulator by email at <u>enquiries@cleanenergyregulator.gov.au</u> or by phone on 1300 553 542.

People interested in participating in the C+B Pilot should contact their regional NRM group for advice on the establishment and management of plantings. For North Central, your NRM group is:

North Central Catchment Management Authority w: <u>http://nccma.vic.gov.au</u> e: <u>info@nccma.vic.gov.au</u> ph: 03 5448 7124

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
Area	Must consist of more than a single row of plantings.	The aggregate area of <i>plantings</i> in a project must be between 5-200 hectares.
Newness and additionality	 The plantings <u>must</u> be new and planting <u>must</u> not commence until the project is registered under the ERF. The plantings <u>must</u> not be required to be carried out under a law of the Commonwealth, a State or a Territory. The project <u>must</u> not be used to meet a statutory obligation to offset the adverse impacts of another development. 	No relevant eligibility conditions. *In applying to participate in the C+B Pilot, proponents must not include the cost of management actions that are required to be carried out under a law of the Commonwealth or a State or Territory, or are already funded under another Commonwealth, State, Territory or local government environment program.
Land use history	 The planting area <u>must</u> have been clear of forest for at least 5 years. The planting area <u>must</u> not contain woody biomass or invasive native scrub that needs to be cleared in order for the planting to occur, other than a known weed species. The planting area <u>must</u> not have been previously illegally cleared of native forest, or have contained a wetland that was illegally drained. The planting area <u>must</u> not have been legally cleared of native forest, or have contained a wetland that was illegally drained. The planting area <u>must</u> not have been legally cleared of native forest, or have contained a wetland that was illegally drained. The planting area <u>must</u> not have been legally cleared of native forest, or have contained a wetland that was legally drained, within the previous 7 years (or 5 years if there has been a change of ownership). 	No relevant eligibility conditions.
Regulatory approvals	Proponents must obtain all relevant regulatory approvals that are necessary to enable the project to be undertaken. Regulatory approvals are approvals required under a law of the Commonwealth, a State or a Territory relating to the environment, water or land use and development.	Projects must be able to be registered as an eligible offsets project under the ERF's <i>Carbon Credits (Carbon Farming</i> <i>Initiative) (Reforestation by</i> <i>Environmental or Mallee Plantings—</i> <i>FullCAM) Methodology Determination</i> 2014.
Consents from other parties	 Proponents must obtain the written consent of all eligible interest holders to the registration of the project under the ERF. Eligible interest holders are people who hold eligible interests in the land on which the project is located. Eligible interests cover a range of interests held in relation to land, including estates and other registered proprietary interests (e.g. leases, 	No relevant eligibility conditions.

Table 1. Eligibility conditions

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
	easements and covenants), and mortgages and charges held over the land by a bank, financial institution or other party.	
NRM specific requirements	If the project area is covered by a regional NRM plan, the application for registration under the ERF <u>must</u> be accompanied by a statement about whether the project is consistent with the plan.	No relevant eligibility conditions.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
Prohibited planting areas	See Table 1, Land use history.	 Plantings must not occur in: areas that did not naturally support trees and shrubs (e.g. some wetlands, grasslands); in ecological communities listed as threatened under relevant State, Territory or Commonwealth legislation (e.g. Natural Temperate Grassland); or utility easements. Utility easements are areas of land that utility providers are legally entitled to use and access for the purposes of providing utility services (e.g. electricity, gas, telecommunications and sewerage).
Plant species composition	 Plantings must consist of a mixture of tree and shrub species that: are native to the local area of the planting; and are sourced from seeds from within the natural distribution of the species and are appropriate to the biophysical characteristics of the area of the planting. Plantings may be a mix of trees, shrubs, and understorey species that reflect the structure and composition of the local native vegetation community. 	 Plantings must be either a local vegetation community planting[^] or a simple mixed native planting. A local vegetation community planting is a planting that: as far as practical given planting density, tree proportion and crown cover requirements, reflects the structure and composition of the relevant EVC or EVCs; and consists of a minimum of 40% of the strub species from the relevant EVC or EVCs;* A simple mixed native planting is a planting that: as far as practical given planting density, tree proportion and crown cover requirements, performs similar ecological functions to the relevant EVC or EVCs and generates benefits for local native biodiversity; and consists of a minimum of 20% of the strub species from the relevant EVC or EVCs and generates benefits for local native biodiversity; and consists of a minimum of 20% of the strub species from the relevant EVC or EVCs or EVCs.
		 [^] Local vegetation community plantings will receive higher biodiversity benefit scores, all else being equal. *See Appendix for resources to assist in identification of relevant EVCs.

Table 2. Planting design conditions

identification of relevant EVCs.

Trees are woody plants that at maturity are generally more than 2m tall and either have a single *stem* with branches well above the base or, if multi-*stemmed*

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
		from the base (or within 20cm from ground level), their largest <i>stem</i> typically has a diameter greater than 5cm measured 130cm above the ground.
		A <i>stem</i> is the ascending axis of a plant and is generally the main structural component of the above-ground portion of <i>trees</i> and <i>shrubs</i> .
		Shrubs are woody plants that are:
		• generally less than 2m tall if single- stemmed; or
		• if multi- <i>stemmed</i> from the base (or within 20cm from ground level), are generally less than 2m tall or, if more than 2m tall, their largest <i>stem</i> typically has a diameter less than 5cm measured 130cm above the ground.
		<i>Plantings</i> should include <i>ground cover</i> <i>species</i> where possible. Ground cover <i>plantings</i> must reflect the structure and composition of the relevant EVC.
		<i>Ground cover species</i> are herbaceous (non-woody) plants, including grasses and forbs.
		To make <i>plantings</i> more resilient to climate change, the seed for <i>plantings</i> should comprise 70% locally sourced, 20% from hotter and drier climates and 10% from cooler, wetter climates. To avoid doubt, the species must still be native to the local area.
		Proponents should consider the following with respect to species composition:
		 drought resilience and the potential effects of climate change;* the availability of tubestock and seed from local nurseries and seed suppliers;
		 that a diverse and dense mid-storey provides benefits for native birds; and that ground cover plants require effective control of introduced plant species to achieve high survival.
		species to achieve high survival rates. *For further information on considering
		climate change in your <i>plantings</i> see the publication <i>Climate ready revegetation: A</i> <i>guide for natural resource managers</i> available on the <u>web</u> .

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
Stem density and tree proportion	 Plantings must: be no more than 5m apart, measured from stem-to-stem; and have a stocking density of at least 400 stems per hectare. *Stocking densities affect the way carbon stocks are modelled. Three model calibrations are available to estimate carbon stocks, which depend on the type of planting and stocking density: belt high (high calibration) - must be a belt planting with >1500 stems per hectare; belt low (middle calibration) - must be a belt planting with between 400-1500 stems per hectare; and block (low calibration) - must be a block planting with ≥400 stems per hectare. 	 Tree and shrub plantings must: be no more than 5m apart, measured from stem-to-stem; have a stocking density of at least 400 stems per hectare; have a tree proportion of between 50% and 70%; be planted such that each 0.2 hectare portion of the planting area has forest potential. To avoid doubt, groundcover species are not included in stem counts for these purposes. Tree proportion means the proportion of individual live trees relative to the total of individual live trees and shrubs in a planting. A 0.2 hectare portion of a planting area has forest potential if the planted trees have the potential to reach 2m or more in height and provide crown cover of at least 20% of the portion.
Dimensions of planting	 Plantings can be either belt or block plantings. Belt plantings are plantings in a belt configuration that are ≤40m wide, are at least 40m from the nearest other planting (stem-to-stem) and are not affected by material competition from adjacent trees. Block plantings are non-belt plantings, other than plantings consisting of a single row. 	Individual <i>planting</i> areas <u>must</u> be at least 0.25 hectares (2500m ²). The average width of <i>plantings</i> in a belt configuration <u>must</u> be at least 30m (stem-to-stem) on the short axis of the <i>planting</i> .
Distance from other vegetation, including plantings	The distance to other vegetation determines whether plantings are able to be modelled as belt plantings. Belt plantings must be at least 40m from the nearest other planting (stem-to-stem) and they must not be affected by material competition from adjacent trees. Adjacent trees are trees that lie within 20m of the stems of the closest project tree. There are rules for when adjacent trees are deemed to be causing material competition.	No additional conditions.
Surrounding vegetation in the landscape	No requirement.* *Proximity to other vegetation affects whether plantings meet the definition of belt plantings and can apply the belt calibrations when modelling abatement.	No additional conditions.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
Fire risk	No requirement.	Planting areas:
		 <u>must</u> not be within 50m of buildings used for residential or commercial purposes; and should not be within 50m of any other buildings.
Regulatory compliance	See Table 1, Regulatory approvals.	<i>Plantings</i> must be sited, established and managed in accordance with all applicable Commonwealth and State laws relating to planning, environment and heritage.
Workplace health and safety	No requirement.	Proponents should prepare a workplace health and safety plan for their project.
Cultural heritage	No requirement.	In siting, establishing and managing <i>plantings</i> , proponents should consider cultural heritage impacts and follow relevant Commonwealth, State and local guidelines concerning the protection and management of cultural heritage sites. Contact your regional NRM group for further information.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
Establishment method	Plantings must be established using propagated seedling stock (tubestock) or direct seeding.	<i>Plantings</i> should be established using both tubestock and direct seeding where possible to enhance success.
Site preparation – weed control	Not specified.	Where weed control is carried out using herbicides, the herbicides <u>must</u> be applied in accordance with all applicable Commonwealth and State laws and the manufacturer's instructions.
Site preparation – soil	Not specified.	 Soil preparation must not be done by deep-ripping in <i>planting</i> areas: with significant biodiversity or natural or cultural heritage values, including areas that contain remnant native vegetation, old native <i>trees</i>, patches of native grass or sites of Indigenous cultural significance; or within 200m of a waterway.* *Contact North Central CMA for further information.
Site preparation – total grazing pressure	Not specified.	All livestock grazing must be excluded from <i>planting</i> areas for a minimum of 7 years after <i>planting</i> . Grazing and other significant disturbance by vertebrate pests (e.g. mice, rabbits, goats, deer and pigs), invertebrate pests and overabundant native species (including kangaroos) should be managed where they present a threat to the establishment of the site. Total grazing pressure, including from livestock, vertebrate pests and overabundant native species (including kangaroos) should be managed where they present a threat to the establishment of plants prior to and/or during <i>planting</i> or direct seeding, and be undertaken in a manner that is consistent with applicable Commonwealth, State and local government laws and guidelines.
Timing	Not specified.	<i>Plantings</i> should be undertaken in Autumn or Spring.
Tree protection	No requirement. *Where grazing or another event kills the plantings in ≥5% of the planting area, the proponent is required to notify the Clean Energy Regulator and take actions to mitigate the impacts of the disturbance. This may require the area to be replanted. Proponents will also be	 <i>Plantings</i> should be protected from livestock and other herbivores. If fencing is used: the top strand of wire around <i>plantings</i> must not be barbed to reduce the chance of wildlife entanglement; and

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
	required to re-stratify the carbon estimation area.	• it should be erected prior to <i>planting</i> or direct seeding.
Watering	No requirement.	Proponents should consider watering <i>plantings</i> , particularly tubestock <i>plantings</i> , at the time of establishment.

Table 4. Maintenance

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
Longevity	 Plantings <u>must</u> not be harvested other than for ecological purposes. Plantings <u>must</u> be maintained for a permanence period of either 25 or 100 years, which commences when the first ACCUs are issued to the project. Proponents get to choose whether to have a 25- or 100-year permanence period. 	Plantings must be protected and maintained for the <i>C+B permanence</i> <i>period</i> . The <i>C+B permanence period</i> means the 25-year period commencing on the day the project is registered under the ERF.
Remedial planting	 Replanting may be required if: an event kills the plantings in ≥5% of the planting area; or mortality results in stem densities falling below 400 stems per hectare. 	 Throughout the <i>C+B permanence period</i>, each 0.2 hectare portion of the <i>planting</i> area must have either <i>forest potential</i> or <i>forest cover</i>. Remedial <i>plantings</i> must be established in a <i>planting</i> area if mortality results in a 0.2 hectare portion of a <i>planting</i> area no longer having <i>forest potential</i> or <i>forest cover</i>. A 0.2 hectare portion of a <i>planting</i> area has <i>forest cover</i> if the planted <i>trees</i> are 2m or more in height and provide crown cover of at least 20% of the portion. Remedial <i>plantings</i> must be established in a <i>planting</i> area if: it was originally designed to reflect the structure and composition of the relevant EVC or EVCs; and mortality results in the <i>planting</i> no longer reflecting the structure and composition of the relevant EVC or EVCs; Remedial <i>plantings</i> must be established in a <i>planting</i> area if: it was originally designed to perfect the structure and composition of the relevant EVC or EVCs; and mortality results in the <i>planting</i> no longer reflecting the structure and composition of the relevant EVC or EVCs. Remedial <i>plantings</i> must be established in a <i>planting</i> area if: it was originally designed to perform similar ecological functions to the relevant EVC or EVCs and generate benefits for local native biodiversity; and mortality results in the <i>planting</i> no longer performing similar ecological functions to the relevant EVC or EVCs and generating benefits for local native biodiversity.
Fallen timber	Up to 10% of fallen timber can be used per calendar year for personal use. Fallen debris can be removed for fire protection.	All fallen timber must be left within the <i>planting</i> . Any fallen timber that is moved from firebreaks, access tracks or fences must be placed within the <i>planting</i> area.
Thinning	Is permitted for ecological purposes, but may affect the method of carbon estimation that is used.	 <i>Thinning</i> is not allowed, unless: the <i>planting</i> was originally designed to reflect the structure and

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
		 composition of the relevant EVC or EVCs and the <i>thinning</i> is necessary to ensure the <i>planting</i> achieves this objective; or the <i>planting</i> was originally designed to perform similar ecological functions to the relevant EVC or EVCs and generate benefits for local native biodiversity and the <i>thinning</i> is necessary to ensure the <i>planting</i> achieves this objective; and approval is obtained from the Department of the Agriculture, Water and the Environment before the <i>thinning</i> commences.
Total Grazing Pressure post- establishment	Livestock grazing is permitted if it does not affect forest cover.	Total grazing pressure should be managed where necessary to protect the present and future biodiversity value of the site.
		 Livestock grazing: <u>must</u> not be undertaken for at least seven years after <i>planting</i>; <u>must</u> be limited to pulse or crash grazing; <u>must</u> not be undertaken during December or January; and <u>must</u> not be undertaken if it has a material adverse impact on the survival of the <i>plantings</i>.
		Management of overabundant native vertebrate species (including kangaroos) should be undertaken only where they present a threat to the establishment and future biodiversity value of the site. Where possible, preventative control measures (e.g. fencing and guards) should be prioritised over lethal control.
		All vertebrate pest and overabundant native vertebrate species management <u>must</u> be undertaken consistent with applicable Commonwealth, State and local laws and guidelines.
		Fences and other <i>tree</i> protection measures should be well maintained to ensure the exclusion of livestock and other overabundant native vertebrates.
Invertebrate pest control	No requirement.	Invertebrate pests should be managed where necessary to protect the present and future biodiversity value of the site. Where pest control is carried out using
		pesticides, the pesticides must be applied in accordance with all applicable

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions North Central (Vic)
		Commonwealth and State laws and the manufacturer's instructions.
Fire	No requirement. Prescribed burning is permitted but the greenhouse gas emissions from these burns must be accounted for and if it kills the plantings, steps must be taken to mitigate the impacts (this may include replanting).	Fire must not be intentionally introduced to the <i>planting</i> .
Watering		Proponents should consider watering <i>plantings</i> , particularly tubestock <i>plantings</i> , during the first summer after <i>planting</i> if there is inadequate rainfall.
Ongoing consistency with NRM plans	If a registered ERF project is changed and, as a consequence, it becomes inconsistent with an applicable regional NRM plan, the proponent <u>must</u> notify the Clean Energy Regulator within 90 days.	No additional conditions.

References

Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings— FullCAM) Methodology Determination 2014 (Cth) <u>https://www.legislation.gov.au/Details/F2018C00118</u>.

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Glossary

Defined terms under the C+B Pilot

C+B permanence period means the 25-year period commencing on the day the project is registered under the ERF.

Ecological Vegetation Classes (EVC) are the standard unit for classifying vegetation types in Victoria. EVCs are described through a combination of floristics, lifeforms and ecological characteristics, and through an inferred fidelity to particular environmental attributes. Each EVC includes a collection of floristic communities (i.e. lower level in the classification) that occur across a biogeographic range, and although differing in species, have similar habitat and ecological processes operating. For further information, see here.

ERF means the Emissions Reduction Fund. The Emissions Reduction Fund is a voluntary offset certification scheme established under the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth).

Forest cover—in relation to the C+B Pilot, a 0.2 hectare portion of a planting area has forest cover if the planted trees are 2m or more in height and provide crown cover of at least 20% of the portion.

Forest potential—in relation to the C+B Pilot, a 0.2 hectare portion of a planting area has forest potential if the planted trees have the potential to reach 2m or more in height and provide crown cover of at least 20% of the portion.

Ground cover species means species of herbaceous (non-woody) plants, including grasses and forbs.

Local vegetation community planting means a planting that:

- as far as practical given the planting density, tree proportion and crown cover requirements, reflects the structure and composition of the relevant local vegetation community or communities; and
- meets the minimum local tree and shrub species requirements outlined in Table 2.

Note: In North Central Victoria, local vegetation communities are referred to as 'Ecological Vegetation Classes' (see definition above).

Planting means:

- (a) as a verb, to put or set in the ground tree, shrub and (where relevant) ground cover species using propagated seedling stock or direct seeding; and
- (b) as a noun, an area of trees, shrubs and (where relevant) ground cover species established using propagated seedling stock or direct seeding.

Planting area means the area of land on which plantings are established under the C+B Pilot in accordance with the requirements of the Planting Protocol.

Stocking density means the number of live individual trees or shrubs per hectare in a planting area.

Shrub means a species of woody plant that:

- is generally less than 2m tall if single-*stemmed*; or
- if multi-*stemmed* from the base (or within 20cm from ground level), is generally less than 2m tall or, if more than 2m tall, its largest stem typically has a diameter less than 5cm measured 130cm above the ground.

Simple mixed native planting means is a planting that:

- as far as practical given planting density, tree proportion and crown cover requirements, performs similar ecological functions to the relevant local vegetation community or communities and generates benefits for local native biodiversity; and
- meets the minimum local tree and shrub species requirements outlined in Table 2.

Note: In North Central Victoria, local vegetation communities are referred to as 'Ecological Vegetation Classes' (see definition above).

Stem, in relation to the C+B Pilot, means the ascending axis of a plant and is generally the main structural component of the above-ground portion of trees and shrubs.

Thinning means the selective removal of trees or shrubs for any purpose.

Tree, in relation to the C+B Pilot, means a species of woody plant that at maturity is generally more than 2m tall and either has a single stem with branches well above the base or, if multi-stemmed from the base (or within 20cm from ground level), its largest stem typically has a diameter greater than 5cm measured 130cm above the ground.

Tree proportion means the proportion of individual live trees relative to the total of individual live trees and shrubs in a planting.

Utility easement means an area of land that utility providers are legally entitled to use and access for the purposes of providing utility services (e.g. electricity, gas, telecommunications and sewerage).

Summary of key defined terms relevant to the ERF Environmental Plantings Method

Set out below is a summary of key terms and phrases that are used in, or in relation to, the ERF's Environmental Plantings Method. Where only a summary is provided, references are provided to the statutory instrument(s) where the full definition can be obtained. Readers should note that terms and phrases that are defined under the ERF do not necessarily have the same meaning under the C+B Pilot. Key terms and phrases that have different meanings under the C+B Pilot are marked below with an asterisk (*).

Belt plantings are plantings in a belt configuration that are at least 40m wide, are at least 40m from the nearest other planting (stem-to-stem) and are not affected by material competition from adjacent trees. For the full definition, see *Carbon Credits* (*Carbon Farming Initiative*) (*Reforestation by Environmental or Mallee Plantings— FullCAM*) Methodology Determination 2014.

Block plantings are non-belt plantings, other than plantings consisting of a single row. For the full definition, see *Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014.*

Eligible interest, in relation to an offset project under the ERF, refers to a range of interests held in relation to land, including estates and other registered proprietary interests (e.g. leases, easements and covenants), and mortgages and charges held over the land by a bank, financial institution or other party. For the full definition, see sections 43, 44, 45 and 45A of the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth).

Eligible interest holder, in relation to an offset project under the ERF, means a person who holds an eligible interest in the land on which the project is located.

Forest means land of a minimum area of 0.2 of a hectare on which trees:

- (a) have attained, or have the potential to attain, a crown cover of at least 20% across the area of land; and
- (b) have reached, or have the potential to reach, a height of at least 2 metres.

*Forest cover**—land has *forest cover* if the vegetation on the land includes trees that:

- (a) are 2 metres or more in height; and
- (b) provide crown cover of at least 20% of the land.

Forest potential*—land has forest potential if:

- (a) the land has an area of at least 0.2 hectares; and
- (b) the vegetation on the land includes trees that have the potential:
 - (i) to reach 2 metres or more in height; and
 - (ii) to provide crown cover of at least 20% of the land.

Department of Agriculture, Water and the Environment

FullCAM means the Full Carbon Accounting Model, a calculation tool used by the Australian Government to model Australia's greenhouse gas emissions from the land sector and to model emissions and removals from vegetation projects under the ERF. For further information, see <u>here</u>.

Planting means:

- (a) as a verb, to put or set in the ground species that are eligible under the Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 2014 using:
 - (i) propagated seedling stock; or
 - (ii) direct seeding, including in rows or broadcast;

for the purposes of growing project trees;

(b) as a noun, an area of project trees established using direct seeding or propagated seedling stock.

Regulatory approval, in relation to an offset project under the ERF, means an approval, licence or permit (however described) that:

- (a) relates to, or to an element of, the project; and
- (b) is required under a law of the Commonwealth, a State or Territory that relates to:
 - (i) land use or development; or
 - (ii) the environment; or
 - (iii) water.

*Shrub** means a perennial plant that has primary supporting structures consisting of secondary xylem and that does not have, or have the potential for its stem diameter to be measured at breast height (DBH), where DBH is defined as 130 centimetres in height.

Stem means the ascending axis of a plant and the main structural component of the above-ground portion of trees and shrubs.

*Stocking density** means the number of live individual trees or shrubs per hectare in a carbon estimation area and/or the number of live individual seedlings or seeds per hectare at establishment.

*Tree** means a perennial plant that has primary supporting structures consisting of secondary xylem and that has, or has the potential to for its stem diameter to be measured at 130 centimetres height (i.e. DBH).

Tree proportion means the proportion of individual live trees relative to the total of individual live trees and shrubs in a mixed-species environmental planting.

Appendix A: Guidance in identifying the relevant local vegetation communities for your planting

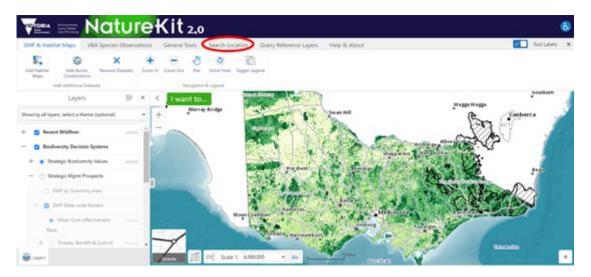
This Appendix sets out some sources for information on natural vegetation in your region. The sources selected are generally the most up to date, which are accessible online. It's not a comprehensive list and most parts of Australia are covered by numerous published guides and studies that can also help with plant species selection, particularly for simple mixed native plantings. Sources of native plants and seeds, such as nurseries, can also help, as can your local Natural Resource Management body or Landcare group.

If you have confidence in your understanding of the natural vegetation across your planting areas you may not need more information to decide on an appropriate species mix. For example, if there are enough paddock trees or roadside patches and other reminders of the native vegetation you might have enough to design a local vegetation community planting that closely reflects local ecosystems.

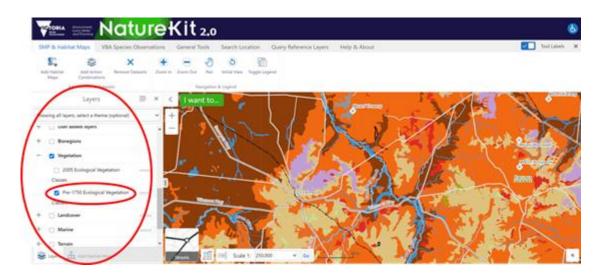
However, even if you know your local plants, the data described here, plus other local sources, should be consulted to confirm natural combinations of species in your region, and also to confirm the scientific names and natural range for species you might know best by a common name. The <u>Atlas of Living Australia</u> is a valuable national resource for biodiversity information.

The Victorian Government's "Nature Kit 2.0" application is a one stop shop for information on Victoria's biodiversity.

- 1. Go to https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit
- 2. Use the search location tab and map controls to locate your planting area(s).



3. In the layer window on the left of the screen, scroll down to the category labelled "Vegetation", click the radio button beside "Vegetation" to make the layers visible and select the "Pre-1750 Ecological Vegetation" layer to display.



- 4. Click on the map within your planting area to query the pre-1750 vegetation layer, you may need to scroll past other layers in the results window to find the pre-1750 result.
- 5. Note the bioregion and EVC number returned from the map query and use that information to find the appropriate <u>EVC benchmark</u> for your bioregion from the bioregion summaries.

$\varepsilon \to \sigma$	emironmentalc.gov.au/biodivenity/bioregions-and-exis-benchmarks		÷ 🛈	1
	EVC Benchmarks - Lowan Mallee bioregion	*		1
	EVC Benchmarks - Monaro Tablelands bioregion	*		
	EVC Benchmarks - Murray Fans bioregion	~		
	EVC Benchmarks - Murray Mallee bloregion	~		
	Murray Mallee, located in the north west of the state, is typified by calcareous material in the farm of broad undulating sandy plains that is often associated with linear, east-west aligned, low sand dunes with intervening heavier textured swales developed from Cainozoic deposits of aliavial, exclan and swampy deposits. The vegetation is dominated by East/West-Dune Mallee with some Chenopod Mallee and Shallow-Sand Mallee.		6	
	The plains, drainage lines and groundwater discharge landscapes are dispersed with salt lakes and gypsum flats with lunettes developed on the eastern margins of the lakes. The Cainazaic deposits give rise to calcareous earths (Calcareools), cracking clays (Vertosols), red sands (Rudosols). The vegetation is dominated by Gypseous Plains Strubland, Saline Strubland (Rook), Plains Grossland and Drainage-line Grossy Woodland.			FEEDBACK
	The bioregion has few surface water bodies due to highly permeable soils and climatic conditions. The Murray river forms the north erforces to be a surface water bodies due to highly permeable soils and climatic conditions. The Murray river forms the			
	Ecological Vegetation Class Benchmarks of the Murray Mallee Bioregian (PDF.11MB)			
	Ecological Vegetation Control (Accessible) (DOCX, 10 MB)			•
	EVC Benchmarks - Murray Scroll Belt bioregion	×		Chet run

6. Find the relevant EVC number in the bioregion EVC benchmark document and check that the description is appropriate for your site. If so, use the species listed in the benchmark as a guide to select species for your planting, particularly for local vegetation community plantings. Shrubs that could feature in plantings are indicated by the MS or MT life form labels. If the EVC description does not fit the site, assess the EVC's indicated for comparable landscape positions in other comparable parts of the landscape across your neighbourhood and seek additional information and advice on a more appropriate EVC to guide species selection.

Questions and feedback

Any questions or feedback about this document should be sent to <u>agstewardship@awe.gov.au</u> or you can contact the <u>Department of Agriculture</u>, <u>Water and the Environment</u> on 1800 329 055.