Carbon + Biodiversity Pilot

Planting Protocol: Central West NRM Region (New South Wales)



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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 C+B Pilot website.

The conditions that apply to projects in the Central West Natural Resource Management (NRM) region are contained in Tables 1-4 below in the third column, titled 'C+B Pilot conditions – Central West (NSW)'. 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 agstewardship@awe.gov.au.

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 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 the Central West, your NRM group is:

Central West Local Land Services

w: https://lls.nsw.gov.au/regions/central-west

e: admin.centralwest@lls.nsw.gov.au

ph: (02) 6841 6500

Table 1. Eligibility conditions

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
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 must be new and planting must not commence until the project is registered under the ERF. The plantings must not be required to be carried out under a law of the Commonwealth, a State or a Territory. The project must 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 must have been clear of forest for at least 5 years. The planting area must 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 must not have been previously illegally cleared of native forest, or have contained a wetland that was illegally drained. The planting area must 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 <u>must</u> be able to be registered as an eligible offsets project under the ERF's Carbon Credits (Carbon Farming Initiative) (Reforestation by Environmental or Mallee Plantings—FullCAM) Methodology Determination 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 leasted.	No relevant eligibility conditions.
	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, easements and covenants), and	

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
	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 must be accompanied by a statement about whether the project is consistent with the plan.	No relevant eligibility conditions.

Table 2. Planting design conditions

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
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); utility easements; or specific areas identified by the Central West LLS that have the potential to disrupt or exacerbate hydrogeological processes or issues [Contact the Central West LLS to check if your proposed planting overlaps with these specific areas]. 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 local vegetation community or communities*; and consists of at least two species of trees and five species of shrubs from that vegetation community or those communities. 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 local vegetation community or communities and generates benefits for local native biodiversity; and consists of at least two species of trees and five species of shrubs that are native to the local area.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
		^ Local vegetation community plantings will receive higher biodiversity benefit scores, all else being equal.
		*See Appendix A for resources to assist in identification of relevant vegetation communities.
		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 from the base (or within 20cm from ground level), their largest stem 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-stemmed from the base (or within 20cm from ground level), are generally less than 2m tall or, if more than 2m tall, their largest stem typically has a diameter less than 5cm measured 130cm above the ground.
		Plantings should include ground cover species where possible. Ground cover plantings must reflect the structure and composition of the local vegetation community.
		Ground cover species are herbaceous (non-woody) plants, including grasses and forbs.
		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;
		 that ground cover plants require effective control of introduced plant species to achieve high survival rates.
		*For further information on considering climate change in your <i>plantings</i> see the

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
		publication <i>Climate ready revegetation: A</i> guide for natural resource managers available on the web.
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 35% 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 must be at least 0.25 hectares (2500m²). The average width of <i>plantings</i> in a belt configuration must 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	No additional conditions.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
	belt plantings and can apply the belt calibrations when modelling abatement.	
Fire risk	No requirement.	 Planting areas: must 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.	Plantings <u>must</u> 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 plantings, 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.

Table 3. Establishment conditions

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
Establishment method	Plantings must be established using propagated seedling stock (tubestock) or direct seeding.	No additional conditions.
Site preparation – weed control	Not specified.	Where weed control is carried out using herbicides, the herbicides must 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.
Site preparation – total grazing pressure	Not specified.	All livestock grazing <u>must</u> be excluded until the <i>tree plantings</i> have become established (approximately 1.5m tall). 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.	No additional requirements.
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 required to re-stratify the carbon estimation area.	 Plantings should be protected from livestock and other herbivores. If fencing is used: the top strand of wire around plantings must not be barbed to reduce the chance of wildlife entanglement; and it should be erected prior to planting or direct seeding.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
Watering	No requirement.	Proponents should consider watering plantings, particularly tubestock plantings, at the time of establishment.

Table 4. Maintenance

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
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 C+B permanence period. The C+B permanence period 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 local vegetation community or communities; and mortality results in the <i>planting</i> no longer reflecting the structure and composition of the relevant local vegetation community or communities. 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 local vegetation community or communities and generate benefits for local native biodiversity; and mortality results in the <i>planting</i> no longer performing similar ecological functions to the relevant local vegetation community or communities and generate benefits for local native biodiversity; and
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.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
Thinning	Is permitted for ecological purposes, but may affect the method of carbon estimation that is used.	 Thinning is not allowed, unless: the planting was originally designed to reflect the structure and composition of the relevant local vegetation community or communities and the thinning is necessary to ensure the planting achieves this objective; or the planting was originally designed to perform similar ecological functions to the relevant local vegetation community or communities and generate benefits for local native biodiversity and the thinning is necessary to ensure the planting achieves this objective; and approval is obtained from the Department of the Agriculture, Water and the Environment before the thinning 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: • must not be undertaken until the plantings have become established (approximately 1.5m tall); • must be limited to pulse or crash grazing; and • must not be undertaken if it has a material adverse impact on the survival of the plantings. 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 must be undertaken consistent with applicable Commonwealth, State and local laws and guidelines. Fences and other tree 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.

Consideration	Emissions Reduction Fund requirements	C+B Pilot conditions - Central West (NSW)
		Where pest control is carried out using pesticides, the pesticides must be applied in accordance with all applicable 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 plantings, particularly tubestock plantings, during the first summer after planting 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 must 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) https://www.legislation.gov.au/Details/F2018C00118.

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NESP Threatened Species Recovery Hub. 2021. What makes an effective planting for supporting biodiversity on farms? How-to Guide. National Environmental Science Program.

NSW Biodiversity Conservation Trust. 2019. Restoring Native Vegetation. Guidelines for Assisted Regeneration and Revegetation. NSW Government.

Vegetation Matters. 2014. North Burnett Riparian Revegetation Guidelines. Burnett Catchment Care Association.

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.

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.

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.

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.

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 here.

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 is 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.

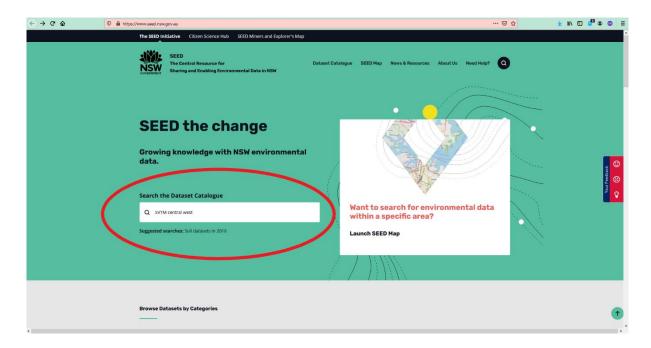
If you have confidence in your understanding of the natural vegetation across your planting areas you may not need more information to decide on an appropriate species mix. For example, if there are enough paddock trees or roadside patches and other reminders of the native vegetation you might have enough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

But 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 Atlas of Living Australia is a valuable national resource for biodiversity information.

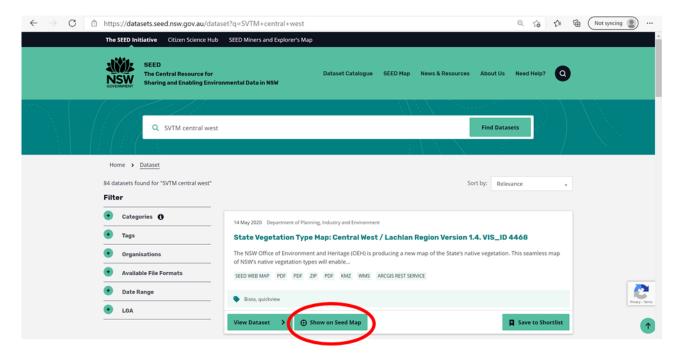
The following guidance involves two web application provided by the New South Wales government for information on vegetation associations. The State's most detailed information on plant species associations is assembled for 'Plant Community Types' (PCTs).

To find PCTs relevant to your planting area

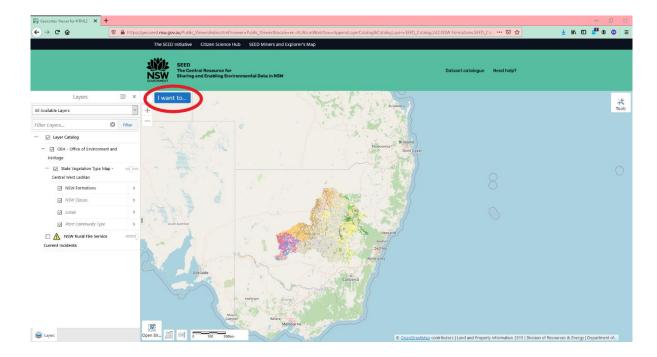
1. Go to https://www.seed.nsw.gov.au/ and enter "SVTM central west" into the search box. (Alternatively, click on this link to go directly to the map – go to Step 3).



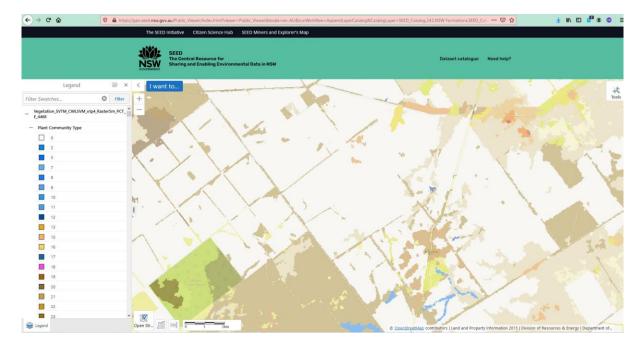
2. On the search results page select "Show on Seed Map" under the top entry.



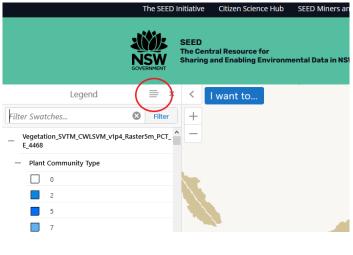
3. In the map view, click on the blue button "I want to" and select a preferred way to locate your property, for example 'Find an Address', or alternatively use the map controls to navigate to your planting area.

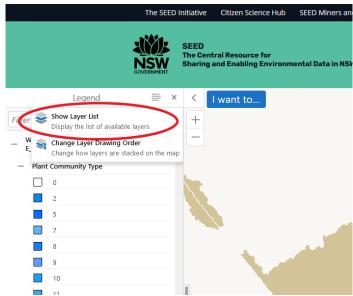


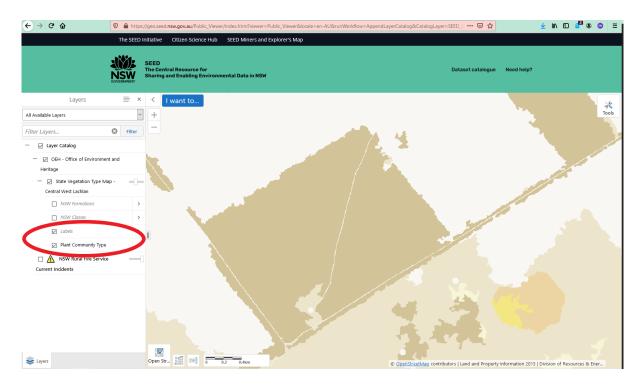
4. The details displayed on the PCT map depend on the scale you are viewing it at. If you cannot see labels indicating PCT types overlaid on the coloured PCT symbology you need to zoom in to a closer, larger scale. In the image below, the PCTs (listed according to their unique ID) can be seen in the left of the screen.



5. For further detail, click on the Panel Actions Menu (the four lines next to Layers – see image below), then select Show Layer List, and ensure Labels and Plant Community Type are selected.



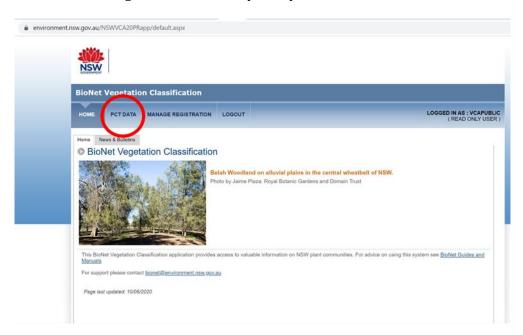




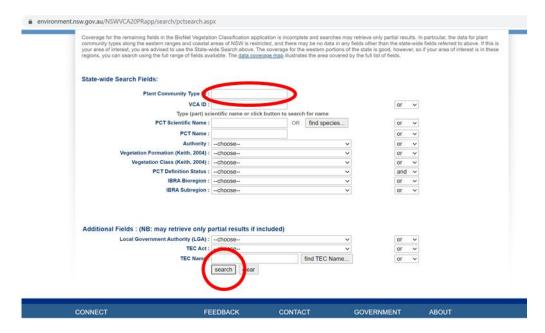
6. Note the PCT names and/or identification numbers that occur in your planting area. If none are listed on or near your planting area, note the closest PCTs that are similar to your planting site in terms of soil, landform and aspect.

To find which species are characteristic of the PCTs

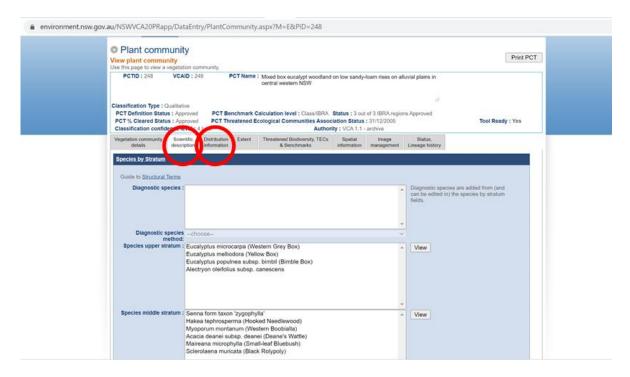
- 7. A second NSW government application called <u>BioNet</u> is now required to help you find out which species of plants are typically found in the plant communities of PCTs likely to have occurred in your planting area. Access to BioNet is free but requires user registration, which is simple to do, if you are a new user. Click on 'Register here' and follow the steps.
- 8. After signing into the BioNet app select the PCT DATA tab to source detailed information for a particular PCT or to filter the long list of possible PCTs based on other information such as regional location and plant species names.



9. PCT information is easiest to access in BioNet if you know the PCT name or PCT number you're searching for. Using the PCT information you hopefully identified in the previous steps, enter the PCT name into the PCT Name field, or enter the PCT number into the field labelled "Plant Community Type ID" and click "Search" button at the bottom of the form.



10. The description of the PCT opens in a new window and includes lists of important species under the "Scientific description" tab. This information can be used in designing your planting. You can also use this resource to find useful information on ecology and landscape position on the "Distribution information" tab, and lists of significant biodiversity values under "Threatened Biodiversity, TECs & Benchmarks" tab.



Questions and feedback

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