

Department of Climate Change, Energy, the Environment
and Water


Planting Plan Guide

For the Riverina region



April 2024





Acknowledgment of Country NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) acknowledges the Traditional Owners and Custodians of the land on which we live and work and pays respect to Elders past, present and future.

Published by NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW)

Title Planting Plan Guide for the Riverina region

First Published April 2024

ISBN 978-1-923200-00-5

Cover image Credit: Katherine Clare, NSW DCCEEW

© State of New South Wales through the NSW Department of Climate Change, Energy, the Environment and Water – April 2024. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose provided you attribute the NSW Department of Climate Change, Energy, the Environment and Water as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer The information contained in this publication is based on knowledge and understanding at the time of writing (February 2024) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Climate Change, Energy, the Environment and Water), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Contents

1 Creating a planting plan	5
1.1 The guide and workbook.....	5
1.2 Planting plan layout.....	6
1.3 Maps.....	6
2 Property information	7
2.1 Property.....	7
2.2 Local landscape.....	7
2.3 Landscape map.....	7
3 Carbon revegetation project	9
3.1 Registered carbon project.....	12
3.2 Living Carbon project.....	12
3.3 Planting map.....	13
4 Project Activities	16
4.1 Revegetation method.....	16
4.2 Site preparation.....	16
4.3 Fencing.....	18
4.4 Tree protection.....	20
4.5 Monitoring and maintenance.....	21
5 Target co-benefits	23
5.1 Target co-benefits.....	23
5.2 Biodiversity Map.....	24
5.3 Species diversity and abundance to be planted.....	26
6 Environmental accounting	28
6.1 Designing your environmental account.....	28
6.2 Specific method requirements.....	30
7 Project Delivery	31
7.1 Timing considerations.....	31
7.2 Project schedule for 18 months of the Living Carbon grant.....	31
7.3 Project schedule for 1 to 5 years.....	32
7.4 Project schedule for 6 to 25 years.....	32
8 Budget and contractors	35
8.1 Budget.....	35
8.2 Nominating contractors.....	37

<u>9 Landholder commitment and on-ground support partner endorsement</u>	<u>38</u>
<u>10 Appendix</u>	<u>39</u>
<u>Appendix A: Terms and definitions</u>	<u>39</u>
<u>Appendix B: Regional resources and information.....</u>	<u>43</u>
<u>Appendix C: Resources</u>	<u>62</u>

1 Creating a planting plan

As part of your Living Carbon grant application, you are required to submit a completed planting plan that is endorsed by an on-ground support partner.

We have developed a planting plan template that you can download from our [website](#), with accompanying regional guides (like this one) and an optional workbook, to help you prepare and complete a planting plan that meets the requirements of the NSW Government's Living Carbon grant program. You must complete your planting plan by using our template which you can find on our [website](#). If your grant application is successful, the plan will guide you through implementation.

1.1 The guide and workbook


This **planting plan guide** (guide) explains how to complete the **planting plan**. It contains general information about grant activities, regional specifications, worked examples and links to useful resources.

There is a unique planting plan guide for each eligible grant region. You must refer to [the guide specific to your region](#) when planning your Living Carbon project and completing your planting plan. This planting plan guide is for use in the Riverina region.

The **planting plan workbook** (workbook) is an optional tool you can use to help you complete your planting plan. It is an excel workbook/file that contains blank and pre-formatted versions of the tables in the plan. You **do not** need to submit the workbook with your Living Carbon grant application.

If you decide to use the workbook, we recommend that you fill out each table in the workbook first, then copy and paste the completed tables into your planting plan. When you do this, please **paste the contents only – without the formulas**.

Do this by:

1. selecting/highlighting the completed table in the workbook
2. right click and select 'Copy'
3. go your planting plan, place the cursor where you want to paste/insert the table and right click on it,
4. select 'Paste Special'
5. select the first icon on the left to 'Keep Source Formatting (K)' ()

Please ensure you use the planting plan guide for the region where your project is located.

1.2 Planting plan layout

The guide and planting plan are organised in numbered sections that (in most cases) correspond to each other, to make it easy to move between documents.

The planting plan is divided into the following four key themes:

- Section 2: Property Information
- Sections 3 and 4: Your carbon revegetation project and project activities
- Sections 5 and 6: Target co-benefits and environmental accounting
- Sections 7 and 8: Project delivery and budgets and contractors

1.3 Maps

The following 3 maps will form part of your planting plan:

1. Landscape (section 2.3 of the plan): your project in the context of the surrounding landscape.
2. Planting map(section 3.3 of the plan): your project details and features.
3. Biodiversity (section 5.2 of the plan): biodiversity records to help justify the choice of your intended biodiversity co-benefits.

You must also attach a detailed version of each map in your online SmartyGrants application, as an image or PDF file that is larger than A4 size.

You may use your preferred website or software to create the maps. The on-ground support partner can also assist you with developing maps for your planting plan. Suitable and free software for mapping includes Google Earth, Google Maps and SixMaps. A list of useful mapping tools and resources for mapping biodiversity and vegetation is in Appendix C Resources.

The maps should include sufficient detail and accuracy to enable checking of measurements, such as the size (in hectares) of individual planting sites and the length of proposed fence construction. All maps should have a compass, legend and scale bar.

2 Property information

This section captures the basic information about the property and the planting project location within the surrounding landscape. Please provide the information below in section 2 of your planting plan.

2.1 Property

Information about the property your project is located on.

- Name of owner (and property manager if applicable)
- Address
- Property area (ha)
- Enterprise(s) run on the property
- Year the current landholders came into ownership of the property
- Natural resource management (NRM) (Local Land Services) region

2.2 Local landscape

Information about the environment on and surrounding the property that your project is located on.

- Average annual rainfall (mm)
- Soil type(s) on the property, particularly where you plan to plant
- Nearest remnant, existing or regenerated native vegetation on the property and adjacent land that your project could connect to (show on the Landscape map)
- Key natural features (waterbodies, elevated areas, rocky outcrops, unique ecosystems, etc.)

2.3 Landscape map

Please provide a satellite/aerial image map of your property and surrounding land showing:

- Important features that impact connectivity and co-benefits, such as nearby bushland, national parks, creeks, rocky outcrops.
- The total carbon estimation area(s) (CEA) for your registered environmental planting carbon project (show the entire project/your total CEA(s), even if your Living Carbon project's area is only a part it).
- Sites with existing revegetation, or other planned revegetation sites.

If you have determined reference sites for your Environmental Account with Accounting for Nature (AfN), and those sites occur within your landscape or planting map, please mark where they are. An example of the landscape map is in Figure 1.

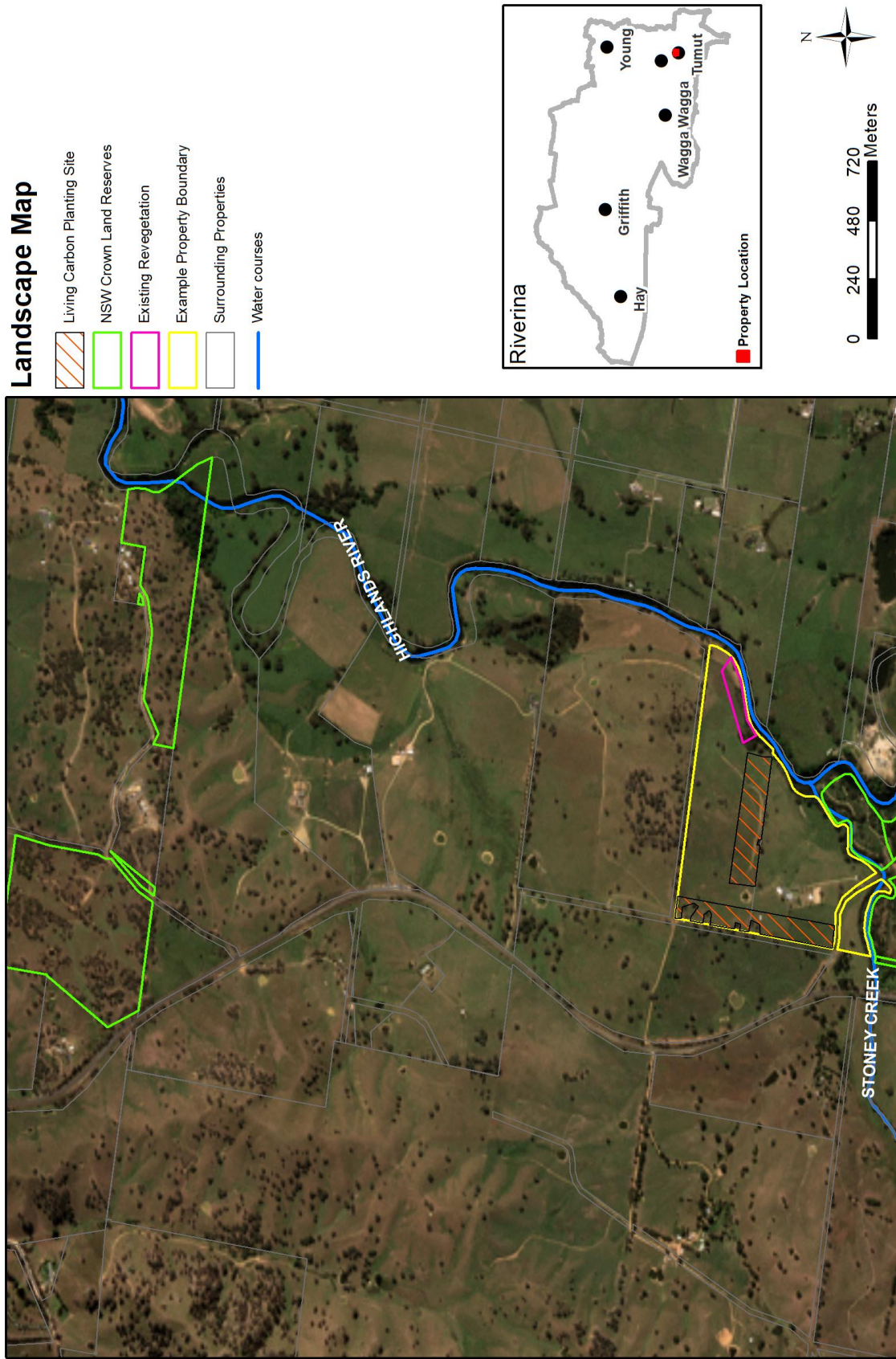


Figure 1: Example Landscape map

3 Carbon revegetation project

Designing your project

When planning your project, you need to consider:

- the carbon project requirements of the Environmental Planting Pilot (EPP) [method](#)
- the Living Carbon grant [guidelines](#)
- the regional recommendations for planting projects
- the unique needs of your project such as tree protection materials

As a carbon project using the approved Environmental Planting Pilot (EPP) method under the Australian carbon credit units (ACCU) scheme, your revegetation project must meet a series of requirements such as a minimum planting density of 200 stems per hectare.

Your project also needs to comply with the Living Carbon grant requirements, such as a minimum total project area of 10 hectares, and recommendations for your region such as the minimum size for an individual site planted.

Table 3a below outlines differences between some of the requirements of the ACCU Scheme's EPP method for carbon projects and the Living Carbon grants. The Living Carbon grant requirements include regional specifications and recommendations, and at times exceed the ACCU Scheme's requirements.

You should check the rules for EPP projects prior to registering your carbon project as they may change after the publication of this guide. Also note that while the EPP method is scheduled to expire on 30 September 2024, it is expected to be replaced by an equivalent very similar method.

Table 3b below sets out information about the regional specific recommendations for the design of a revegetation project. We have provided a list of useful regional specific resources [Regional specific resources for planning revegetation and biodiversity project in the Riverina region](#).

Please note, while Table 3a and Table 3b below list the design requirements for your Living Carbon project, you may have to meet higher thresholds to achieve your biodiversity co-benefit target. More detail on co-benefits is in section 5.

Table 3a: Project design requirements

The design requirements for planting projects using the Environmental Planting Pilot method and seeking funding under Living Carbon grants.

Design element	ACCU Scheme – EPP method	Living Carbon – Riverina region
Total (aggregate) project area (ha)	0.2 – 200 ha	10 – 200 ha
Minimum size of each planting site or CEA	N/A	As per regional requirements in Table 3b, below.
Biodiversity benefit will be measured	No	Yes
Revegetation method	Native plants can be established via planting tubestock and/or direct seeding.	
Plant species composition	A mixture of tree and shrub species that are native to the local area and sourced from seeds stock.	As per regional requirements in Table 3b below.
Structure	Must reflect the structure and composition of the local native vegetation community or what it would have been.	
Species height and crown cover	Must have the potential to reach at least 2 metres in height and achieve a crown cover of at least 20% over the planting area.	
Seed and tubestock sources	Must be sourced from within the natural distribution of the species and must be appropriate to the biophysical characteristics of the proposed planting area.	
Planting density	Must consist of more than a single row of stems, have a stocking density of more than 200 stems per hectare and a density that will achieve forest cover.	As per regional requirements in Table 3b below.
Shape of plantings	Any shape or configuration provided it consists of more than a single row.	Plantings can be either linear corridors, block plantings or a combination of both.
Position of plantings	Must be on land that has been cleared for 5 years.	Must not be undertaken under powerlines, within easements where they may interfere with utilities, or on crown land without approval. Plantings can occur along riparian, lower, mid or upper slopes.

Table 3b: Regional specific recommendations for the design of revegetation projects

Design element	Riverina specifications and recommendations
Minimum size of an individual planting site (See map at Appendix B: Regional resources and information for zones)	<p>For planting zones 1, 2 and 3 – individual planting sites may be a minimum of 2.5 ha.</p> <p>For planting zones 4 and 5 – individual planting sites may be a minimum of 3.5 ha.</p> <p>For planting zones 6, 7, 8 and 9 – individual sites may be a minimum of 4.5 ha.</p>
Plant species composition and diversity	<p>Plantings must be a mix of tree and shrub species that reflect the structure and composition of the local native vegetation community.</p> <p>Refer to the Species planting lists by planting in Appendix B, for a list of plant species suitable for each planting zone.</p> <p>A minimum of 5 tree species and 5 shrub species must be included in the planting mix for all planting zones.</p>
Planting density (See map at Appendix B: Regional resources and information for zones)	<p>For planting zones 1, 2 and 3 – plants should be planted at 4-5 m spacings along rows, with 5 m spacing between rows to achieve a planting density of approximately 400 stems/ha.</p> <p>For planting zones 4 and 5 – plants should be planted at 5-6 m spacings along rows, with 5 m spacing between rows to achieve a planting density of approximately 333 stems/ha.</p> <p>For planting zones 6, 7, 8 and 9 – plants should be planted at 6-8 m spacings along rows, with 5 m spacing between rows to achieve a planting density of approximately 250 stems/ha.</p> <p>All plantings need to be a minimum of 5 rows.</p>

Regional specific resources

Below is a list of resources that will support land managers in Riverina to understand, plan and implement a carbon and/or a revegetation project that has biodiversity co-benefits.

Remember, there is also support available by getting in touch with Riverina Local Land Services.

- Riverina Local Land Services website and information about Natural Capital
- [Riverina Natural Resources Action Plan – Evidence Guide](#), section 5 includes a list of threatened species in different parts of the Riverina region.
- [Rural-Living-Handbook-2020.pdf](#)
- [Wiradjuri-plant-use.pdf](#)

- [State Vegetation Type Map: Riverina Region](#) – available free, online on the SEED website. Click the link, then scroll down on the right-hand side, and click “Show on SEED Map”.
- A planting species list for planting zones in Riverina is in Appendix B: Regional resources and information of the guide.

3.1 Registered carbon project

Please record information about your ACCU Scheme carbon project’s registration with the Clean Energy Regulator (CER) in section 3.1 of your planting plan:

- ACCU Scheme Project ID: the CER provided this to you at registration and will use it to identify your project in the CER’s public carbon project register.
- ACCU Scheme Project name: the name of your project registered under the ACCU Scheme.
- Total carbon estimation area (ha): the total area (ha) of your carbon project, calculated from the map of the carbon estimation area(s) for your registered carbon project.
- Total area of the CEA that will also be part of your Living Carbon project (ha).
- Project description: the description of your project when you registered it under the ACCU Scheme.

Note: You can use this guide to help plan your carbon project before registering it with the ACCU Scheme. If you do this, then you can leave this section blank and return to complete it once you have the relevant information for your registered carbon project.

3.2 Living Carbon project

Once you have reviewed Table 3a and Table 3b **Error! Reference source not found.** above, complete Table A in your planting plan. This will provide an overview of your Living Carbon project’s design and demonstrate that it aligns with regional specifications for planting projects in Riverina. Include the Plant Community Types (PCT) that you will be planting at each site. A worked example of Table A is provided below to show you how to fill in this table.

Then complete the check list in your planting plan to confirm that your design meets the requirements of this guide (refer to Table 3b above). See the Example check list in Figure 2 below.

Your on-ground support partner can assist you with information about the most appropriate Plant Community Types to plant. Refer to the definition of planting sites for Living Carbon projects in Appendix A: Terms and definitions.

Example Table A: Planting sites and properties/characteristics

Planting site(s)	Area (ha)	Stems per ha	Target canopy (%)	Plant community type	Description
A	7.5	400	25%	PCT 277: Blakelys Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	125 m wide corridor running 620 m east-west across the centre of the property, excluding the area around an existing tree. PCT 227 is associated with box gum woodland, is the likely PCT prior to clearing, and will provide suitable habitat for the target species.
B	5.0	400	25%	As above	90 m wide corridor running 700 m north-south along the western boundary, excluding areas around several existing remnant trees. See above comment for PCT 277.
Total	12.5				

Figure 2: Example check list for Planting Zone 1

<input checked="" type="checkbox"/> The smallest planting site/CEA for the Living Carbon project is 2.5 ha.
<input checked="" type="checkbox"/> All planting sites/CEAs have a species composition containing a minimum of 5 trees and 5 shrubs being planted. The species composition of all sites combined is in Table I.
<input checked="" type="checkbox"/> All planting sites have a planting density of 400 stems or more, per the regional requirements.
<input checked="" type="checkbox"/> Seed and tubestock will be purchased from local suppliers. To ensure local provenance, only seeds or tubestock generated from seeds collected within 40 km radius will be planted.

3.3 Planting map

In section 3.3 of your planting plan, please provide a map that shows the following:

- The planting site(s) for which you are seeking funding from the Living Carbon grant. These sites should be detailed in your planting plan. Please label the site(s) how you will refer to them in your plan, for example, sites A, B and C. Your Living Carbon project's planting sites will likely match the CEA(s) for your registered carbon project.

- If your Living Carbon project is only part of the total CEA(s) of your registered carbon project (shown in the Landscape map), then please show the difference in the planting map.
- Any fences that will be installed or repaired, and existing fences, that will be used to protect plantings. Use different colours or symbols to distinguish between fences that exist, will be installed or will be repaired.
- The places where you plan to have your photo monitoring points.

An example of the planting map is in Figure 3 below

You should also provide a brief description of the main features of the map.

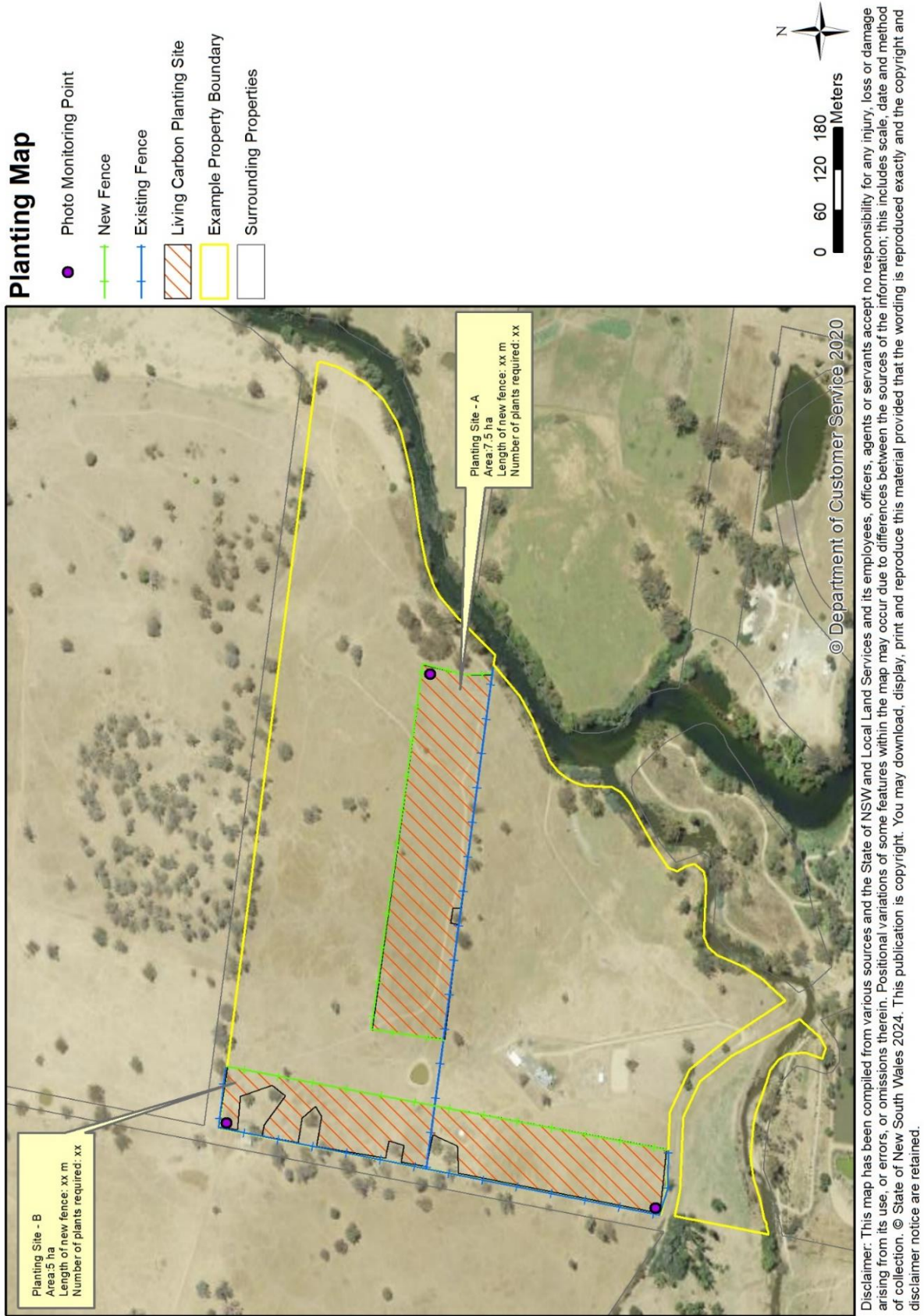


Figure 3: Example Planting map

4 Project Activities

You need to consider the specific needs of your project are or will be, throughout its different stages, to ensure the long-term survival and success of your plantings. This could include tailoring site preparation, using tree protection materials, installing and/or fixing fencing to protect plantings, and planning targeted maintenance and monitoring activities.

The needs and requirements of each project will differ based on location, soil, climate and the species being planted. Advice is provided in sections 4.1 to 4.5, along with the regional resources previously listed in section 3. Your on-ground support partner can also assist you to identify the needs of your project and complete the relevant details in your planting plan.

Note: When completing Tables B to F in section 4 of your plan you can combine different planting sites that use the same revegetation methods onto one line.

4.1 Revegetation method

You can revegetate the planting sites in your project by direct seeding or tubestock planting. Complete Table B in your planting plan with details about which revegetation method you will use for your planting site(s) and how many plants will be allocated to individual sites and/or revegetation methods. A worked example for Table B is provided below to help you understand how to fill in your table.

Example Table B: Revegetation method(s) of your Living Carbon project

Revegetation method	Planting site(s)	Number of stems	Description and reasons
Tubestock	A	3,000	Quality tubestock is locally available for this relatively small planting project and will likely establish better than direct seeding due to significant weed pressure. 400 stems/ha x 7.5 ha
Tubestock	B	2,000	400 stems/ha x 5.0 ha
Total		5,000	

4.2 Site preparation

There are different approaches to preparing a site for direct seeding or tubestock planting. Preparing a site for tubestock may involve reducing biomass, ripping or using an auger, weed control and pest control. Preparing a site for direct seeding may involve reducing biomass,

weed control and pest control. Your approach should be discussed with your on-ground support partner.

Table 4a below includes general information about revegetation projects and specific information relevant to projects in the Riverina region.

Table 4a: Details and regional information for preparing a site for planting

Site preparation activities	Information
Weed control	<ul style="list-style-type: none"> • For sites being direct seeded – sites need to be prepared by reducing biomass to allow for spraying one month prior to direct seeding. • For sites being planted using hicocells/tubestock – sites need to be prepared by reducing biomass, followed by ripping, then spraying one month prior to planting. <p>One month prior to planting/direct seeding, apply knockdown and residual herbicide on 1 m wide strips along the rip line/planting line. This will control weed competition after planting.</p>
Soil preparation	<p>Soil preparation is required for planting tubestock, but not for direct seeding.</p> <ul style="list-style-type: none"> • Includes ripping, using an auger, or similar activities. • Ripping is the most common method for large scale plantings. • Using an auger or other hole-digging techniques are an alternative for smaller areas, particularly those that are sensitive (e.g., prone to erosion) or difficult to access. <p>For tubestock planting, ripping should be done in the following manner:</p> <ul style="list-style-type: none"> • Prior to ripping, check that there are no utilities or services such as power lines, sewer pipes or telephone cables that could be disturbed. • Rip tree lines while the ground is dry using a winged ripper for deep shattering of the soil a minimum of three months prior to planting. • Rip to a minimum depth of 450 mm. • Don't rip under the drip line of existing trees. • Rip across the slope where possible. • Cultivate soil after ripping if there are large clods. • Mound soil over rip lines if the site is damp. • Livestock must be kept off sites that have been ripped for planting, or else soil compaction may occur.

Pest control	<ul style="list-style-type: none"> Seek advice from your regional Local Land Service on the control of pests such as rabbits, hares and pigs six months prior to planting. This may avoid the added expense of tree guards and replanting.
--------------	---

When planning your site preparation, consider whether your proposed activities may harm Aboriginal objects. Following the process set out in [the Due Diligence Code of Practice for Aboriginal Objects Protection in NSW](#) can help you to comply with legal requirements to protect Aboriginal objects.

Note: Grant funds can only be used to fund soil preparation activities (ripping, using an auger, or similar activities) for site preparation. Other site preparation activities related to weed control, including removal of biomass and pest control, will need to be fully paid for by co-contribution funds.

No on-ground project works, including site preparation, should be undertaken prior to:

- registering your project with the Clean Energy Regulator
- successfully applying for the Living Carbon grant

Complete Table C in your planting plan to outline your planned site preparation activities. A worked example of Table C is provided below to help you understand how to fill in this table.

Example Table A: Site preparation activities of the project

Site preparation activity	Planting site(s)	Length (m) or area (ha)	Description and reasons
Weed control	A & B	12.5 ha	Biomass reduction by crash grazing to reduce biomass before ripping and spraying.
Soil preparation	A & B	12.5 ha / 25,000m	Ripping is the most cost-effective method for preparing both sites, totalling 25,000m with rows 5m apart, before spraying.
Weed control	A & B	12.5 ha	Spray Glyphosate on 1 m wide strips along the rip lines one month before planting, to help control weed competition after planting.

4.3 Fencing

If your project requires fencing, please read the information below and complete Table D in your planting plan, including the cost of materials and labour to install your project's fencing. Make sure to include any new or repaired fencing shown on your planting map. Provide information about the type of fencing you plan to install or repair, where it will be installed or repaired around planting sites(s), and the reasonings. You can also include any additional fencing activities required for your project.

Points to note when planning fencing and choosing fencing materials:

- The type of fencing you choose to install must be fit for your intended purpose, whether that is excluding stock, pest animals or native fauna from the planting areas.
- Electric fencing is a useful option if you would like to remove fencing once the trees and shrubs in your planting are mature and grazing will not impact the trees, as permitted by the CER.
- Barbed wire fencing is not recommended, especially on the top wire, due to the potential impact on wildlife. Please discuss the use of barbed wire with your region’s on-ground support partner.
- The cost of fencing is a combination of materials, labour costs for preparation and installation, and additional costs because of variations in terrain.
- Be aware, when planning the shape of your planting sites, that some shapes require a greater distance (perimeter) of fencing for the same area protected. The cost of fencing an irregular shaped planting block on difficult terrain may make your project difficult to justify due to the high overall cost per hectare.

Further information about the recommendations and specifications for fencing in Riverina are detailed in Table below.

Table 4b: Fencing design elements and considerations

Fencing position	<ul style="list-style-type: none"> • Plantings must be protected from livestock and other herbivores. • All fencing must have a minimum set-back of 2.5 m from existing or proposed standing vegetation and have an average set-back of 10 m from the edge of the defined bank in riparian sites.
Fencing type	<ul style="list-style-type: none"> • All fencing must be stockproof and include a minimum of 1 gate for maintenance access. • The top strand of wire around plantings must not be barbed to reduce the chance of wildlife entanglement.

Note: Please be aware that the Living Carbon grant limits the amount of grant funds that can be spent on fencing. **Grant funds must not exceed 50% of the total cost** of the fence and may only be used to pay towards fencing costs that are equivalent to what a standard stock fence would cost. If you want to install a fence that will cost more than a standard stock fence, you need to provide a quote for both types of fencing to clearly show that the grant funds requested are only up to 50% of the equivalent stock fence cost. For example, if a standard stock fence for your project would cost \$10,000 but you choose to build a higher specification fence costing \$13,000, you would still only receive a maximum of \$5,000 (50% of \$10,000) in grant funding for fencing.

Please discuss which fencing materials are most suited to the needs of your planting project with the on-ground support partners or a local expert, and then complete the information in

Table D in your planting plan. **Please write the costs for materials and costs for labour on different lines.**

A worked example of Table D is provided below to help you understand how to fill in this table.

Example Table D: Fencing materials and labour

Materials or labour	Planting site(s)	Length (m)	Description and reason
Fencing Materials	A	870	Fencing wire and posts for new stock fence along the north, east and west side of Site A. \$4,350 based on \$5,000/km.
Fencing Materials	B	700	Fencing wire and posts for new stock fence along the eastern side of Site B. \$3,500 based on \$5,000/km.
Fencing Materials			New gate added to existing fence between Site A and B to provide vehicle and stock access between the north and south paddocks (because the existing gate in that fence will now be within planting site B). One new gate for each of Site A & B. \$650 for 3 gates and materials.
Fencing Labour	A and B		Fencing labour and equipment by the landowner as in-kind. Est. 150 hours general fence (~10m/h) + 20 hours for stays = 170 h @ \$50/h labour & equipment use.

4.4 Tree protection

If your project requires tree protection materials (such as tree guards, water crystals or native plant fertiliser) or labour, please provide details in Table E of your planting plan. Include information about the type and quantity of plant protection (for example tree guards), materials, and labour your project needs, the reasons for use, and which areas they will be used in. You are encouraged to discuss this with the on-ground support partner.

Points to note about plant protection and materials:

- Not all plants require tree protection.
- The tree protection needs of sites planted by tubestock versus direct seeding will differ.
- Tree guards can be sourced in a variety of heights, sizes and materials including plastic, cardboard and metal. Consider what suits your site best. Biodegradable cardboard guards are recommended when near watercourses.
- Tree guards require stakes (bamboo, wood, metal) to hold them up in the ground. Please ensure you purchase enough stakes to install the guards. Usually, 1 - 3 stakes are needed per guard, depending on the type.
- Using planting materials, specifically a native slow-release fertiliser and water crystals, is useful but may not be realistic for larger plantings.
- Tree guards must be removed at the appropriate time.

Further information and regional specifications for Riverina are in Table 4c below.

Table 4c: Regional information for planning planting activities and tree protection materials

Timing of planting	<ul style="list-style-type: none"> Planting/direct seeding to occur a minimum of 6 weeks after residual weed control. Planting/direct seeding should occur 2 months after the autumn break and before mid-August. Planting should occur only when there is satisfactory soil moisture.
Tree protection materials	<ul style="list-style-type: none"> Recommend 1L cardboard tree guards with two stakes per guard. These are biodegradable and more cost effective.

Note: Grant funds can be used for up to 100% of the cost of tree planting protection, materials and labour. Equipment, such as post hole diggers, mallets (for putting in stakes) and watering equipment, are ineligible grant expenditure. You will need to fund or seek third party funding for these items if you require them for your project.

Please discuss which tree protection and materials are most suited to the needs of your planting project with the on-ground support partners or a local expert and complete Table E in your planting plan. A worked example of Table E is provided below to help you understand how to fill in this table.

Example Table E: Tree protection materials and labour

Tree protection materials / labour	Planting site(s)	Description and reasons (include quantity)
Tree protection materials	A and B	5,000 tree guards (one per plant), 1L cardboard – to protect from rabbits and wind.
Tree protection materials	A and B	10,000 stakes (2 per guard), 600mm bamboo – to support tree guards
Planting – Labour (incl. installation of tree guards, etc)	A (all) and B (4ha only)	Planting and installing tree guards, 100 hours contracted labour.
Planting – Labour (incl. installation of tree guards, etc)	B (1ha only)	Planting and installing tree guards, 50 hours volunteer labour (Landcare event, 20 people x 2.5 h each).

4.5 Monitoring and maintenance

Regular activities involved in monitoring and maintaining revegetation projects include:

- watering, if required, particularly in the first 12 – 18 months
- checking survival rate of plantings
- minimising the impact of weeds
- checking whether grazing stock or feral pests are damaging the plantings
- assessing damage after severe weather events and fixing any damaged tree protection materials or fencing
- performing any regional or project specific activities that may be required (see table 4d below).

Table 4d: Regional recommendations and information for monitoring and maintenance

Monitoring	Regional recommendations
Restricted grazing of sites	Once planted, livestock grazing must be excluded for a minimum of 3 years from hikocells/tubestock planted areas, and for 5 years for directly seeded areas. Grazing must be limited to pulse or crash grazing.

Note: Grant funds cannot be spent on monitoring and maintenance. These activities will need to be fully paid for by your co-contribution to the grants.

Please discuss which monitoring and maintenance practices are most suited to the needs of your planting project with the on-ground support partners or a local expert and complete the Table F in your planting plan. A worked example of Table F is provided below to help you understand how to fill in this table.

Example Table F: Maintenance and monitoring of planting project

Maintenance and monitoring	Planting site(s)	Description and reasons
Initial monitoring	A and B	Monitor survival rate as per schedule and if likely to drop below 80% then order more plants and replace dead ones
Initial monitoring	A and B	Monitor soil moisture and arrange watering if cost-benefit assessment indicates it is worthwhile
Initial monitoring	A and B	Regularly monitor weeds and organise any control if required to reduce competition
Initial monitoring	A and B	After extreme events (wind, rain, hail, fire, flood) check tree health, guards etc and organise repair/replace if needed
Initial monitoring	A and B	Exclude livestock for at least 5 years and until plants won't be damaged; monitor for damage from other animals and organise maintenance if needed

5 Target co-benefits

Living Carbon projects aim to demonstrate co-benefits that can be gained from revegetation carbon projects. Applicants must plan their project to deliver co-benefits to a minimum of one flora species, or fauna species or threatened ecological community, as outlined in section 6.3 of the [Living Carbon grant guidelines](#).

We recommend you complete the tables for this section in the planting plan workbook and then copy and paste them into your planting plan. See section 1.1 for instructions.

5.1 Target co-benefits

List the targeted iconic and/or threatened species or Threatened Ecological Communities (TEC) that will benefit from your planting project in Table G of your planting plan. Include information about why you are choosing those species and whether they are threatened or not. For example, actions involving revegetation of habitat may have been identified in a recovery strategy to help recover a threatened species under the NSW Saving our Species program.

A worked example of Table G is provided below to help you understand how to fill in this table.

Example Table G: Targeted biodiversity co-benefits your project aims to achieve and justification

Type	Common name	Scientific name	Status	Justification
TEC	Box-gum Woodland (or White-box Woodland)	<i>White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions</i>	Critically Endangered (Cwlth); Endangered (NSW)	Saving our Species actions include, where appropriate, increase woodland patch size and condition, and reconnect fragmented patches using appropriate landscape configurations, plant species and provenances. Associated with PCT 277.

Fauna	Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	Vulnerable (NSW)	SOS activity to assist recovery includes expand and reconnect smaller patches of open eucalypt forest. Associated with PCT 277.
Fauna	Brown Treekeeper (eastern subspecies)	<i>Climacteris picumnus victoriae</i>	Vulnerable (NSW)	SOS actions include undertaking revegetation, particularly adjacent to woodland remnants and streams, avoiding gaps greater than 100m. Associated with PCT 277.

5.2 Biodiversity Map

In section 5.2 of your planting plan, please provide a map showing:

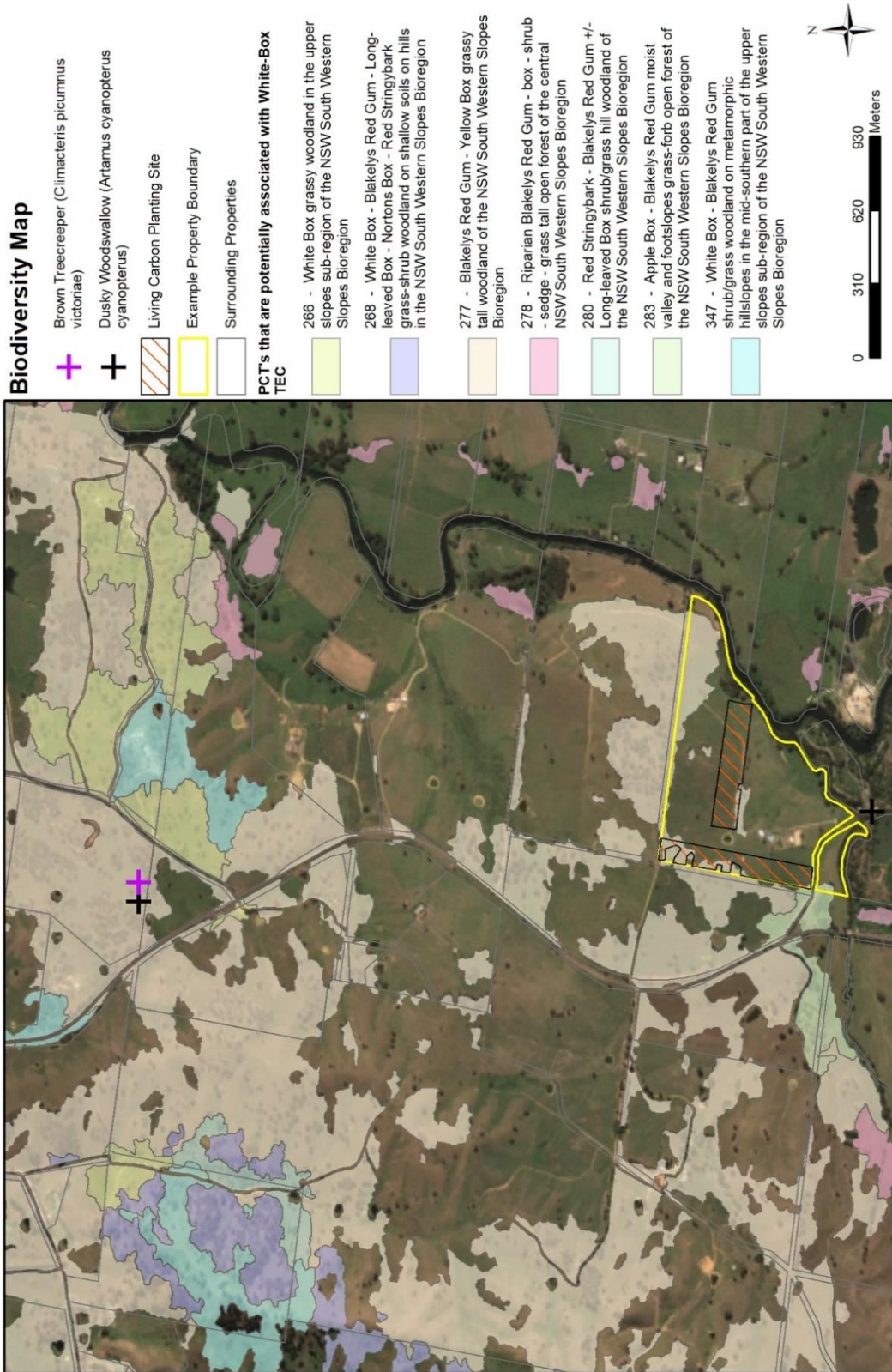
- Current or historical records (occurrences) of any target fauna and/or flora species
- Current or historical maps of any threatened ecological community you aim to restore

You can use records from various sources, including your own observations, as long as they are reliable. Some useful and free sources of biodiversity records include: [BioNet](#), [Atlas of Living Australia](#) and [Sharing and Enabling Environmental Data in NSW \(SEED\)](#). Previous ecological reports on the property or nearby could also be useful.

Local vegetation mapping may be available for identifying threatened ecological communities (TEC) or other target vegetation types. Some council websites also have interactive maps of the vegetation for their area. Otherwise, the [NSW State Vegetation Type Map](#) provides a reasonable guide. An example of the biodiversity map is in Figure below.

What is the purpose of this map?

As part of your Living Carbon project, you must choose at least one iconic native species, threatened species or threatened ecological community (TEC) that you can demonstrate over time has benefitted from your planting project. The aim of the biodiversity map is to show that those species or threatened ecological community are currently found locally or have occurred there historically. Therefore, you can be confident that they will likely benefit from your project. You do not have to map all species that will benefit, just the ones you will directly focus on and promote to add value to your carbon credits.



Disclaimer: This map has been compiled from various sources and the State of NSW and Local Land Services and its employees, officers or servants accept no responsibility for any injury, loss or damage arising from its use, or errors, or omissions therein. Positional variations of some features within the map may occur due to differences between the sources of the information; this includes scale, date and method of collection. © State of New South Wales 2024. This publication is copyright. You may download, display, print and reproduce this material provided that the wording is reproduced exactly and the copyright and disclaimer notice are retained. Potential associations have been defined from the BioNet Threatened Ecological Community to Plant Community Types Association data; all associations require field validation.

Figure 4: Example Biodiversity map

5.3 Species diversity and abundance to be planted

Complete Table H in your planting plan, listing the tree and shrub species you intend to plant, their type (shrub or tree) and how many of each species you will be planting. If a flora species is being planted to directly benefit a target fauna species, for example koala food tree species, or as part of a threatened ecological community that is being restored, please specify that in the far-right column of the table (Target species or community benefited).

A worked example of Table H is provided below to help you understand how to fill in this table.

Example Table H: Species list, diversity, and abundance of species planned to be planted

#	Flora species (scientific name)	Type (T, S*)	Quantity to be planted	Target species or community benefited [^]
1	Acacia dealbata	T	250	Box-gum Woodland
2	Acacia implexa	T	250	Box-gum Woodland
3	Eucalyptus albens	T	500	Box-gum Woodland
4	Eucalyptus blakelyi	T	500	Box-gum Woodland
5	Eucalyptus bridgesiana	T	250	Box-gum Woodland
6	Eucalyptus macrorhyncha	T	500	Box-gum Woodland
7	Eucalyptus polyanthemus	T	500	Box-gum Woodland
8	Eucalyptus rubida	T	250	Box-gum Woodland
9	Acacia buxifolia	S	250	
10	Acacia genistifolia	S	250	
11	Acacia rubida	S	250	
12	Acacia verniciflua	S	250	
13	Banksia marginata	S	250	
14	Bursaria spinosa	S	500	Box-gum Woodland
15	Callistemon pallidus	S	250	
*Type: T for Tree, S for shrub				
[^] Only complete if there is a direct co-benefit to a targeted species or community				

For your carbon project you must plant species that are indicative of the original or predicted Plant Community Type(s) (PCT) for the area being revegetated. This also ensures the best outcomes for habitat restoration.

If you complete Table H in the workbook, Table I will automatically update with the total figures and the total number of species providing a target co-benefit. You can then copy the tables from the workbook and paste them into your planting plan.

If you manually complete Table H in your plan, you will also need complete Table I manually. To do this, count the number of tree species and the total quantity of trees to be planted, and add these numbers to Table I. Do the same for shrub species. You can then review the number of each plant type (noting the requirements for species diversity for your region in Table 3b, in section 3 Carbon revegetation project) and calculate the percentage of trees vs shrubs.

A worked example of Table I is provided below to help you understand how to fill in this table.

Example Table I: Summary of the planting project’s species diversity, abundance and co-benefits

Plant type	Total type	Quantity to be planted	% of total quantity
Trees	8	3000	60%
Shrubs	7	2000	40%
Total	15	5000	100%
Providing a direct biodiversity co-benefit	9	3500	70%

6 Environmental accounting

6.1 Designing your environmental account

You must provide information about the design of the Environmental Account which you will register if your Living Carbon grant application is successful. The on-ground support partner can assist you with determining the most suitable method.

Complete the design of your Environmental Account by following the steps outlined for [Step 1 – Design](#) on Accounting for Nature’s website then complete 6.1 in your planting plan. Most of the information you need to design your Environmental Account with Accounting for Nature (AfN) can be found in other sections of your planting plan.

Table 6a below directs you to where you might find information in your planting plan to help you design your environmental account.

Table 6a: Information needed to design an Environmental Account and where to find it in the planting plan

Design element	Existing location of information provided
Choose an approved AfN method(s)	Select from options in Table 6b, below.
Environmental Account boundary	This is typically your entire property, however it can be just your Living Carbon project planting area or your entire carbon project registered with the CER. Mapped in the Landscape Map in section 2.3 of your planting plan.
Environmental Asset Account boundary(s)	Each planting site could define an asset boundary in your environmental account, however refer to the instructions for the method(s) you choose. Mapped in the Planting Map in section 3.3.
Environmental Assets and sub-assets	Your project’s target co-benefits are listed in Table G of your plan and could be the target asset(s) for your environmental account.
Reference site for vegetation and fauna	Should be considered now but can be determined if your grant application is successful. Optional detail in the 2.3 Landscape map.
Monitoring plan	Included in the schedules in section 7 and can be finalised if your grant application is successful.
Engage an expert	If needed, refer to the Accounting for Nature method instructions.

Choosing a method

You must choose a minimum of one Accounting for Nature (AfN) method and accuracy level to apply to your project. Select from the list in Table 6b which narrows all the methods down to seven that will suit Living Carbon projects and will not require extensive expertise. The on-ground support partner can assist you with determining the most suitable method.

The Accounting for Nature methods are developed at a particular ‘accuracy level’ which reflects the robustness of a method’s approach to measuring the condition of the Environmental Asset. Certain methods offer only one accuracy level, while others offer a choice of 2 or 3 accuracy levels. The higher the accuracy level, the greater the survey effort and/or technical expertise expected. You are responsible for choosing a method and accuracy level that is suitable to your project and aims. Find the instructions for each method on AfN’s [Method Catalogue](#) (see also Appendix C and the note below).

Table 6b: Eligible methods for Living Carbon

Method		80%	90%	95%
FAUNA	<u>F-01 Accounting for Natural Mammal Condition Method</u>			
	<u>F-02: A native woodland bird assessment methodology for diverse regenerating farmlands</u>			
	<u>F-04 Koala Population and Habitat Condition Method</u>			
VEGETATION	<u>NV-03: Green Collar Native Vegetation Condition Monitoring Method</u>			
	<u>NV-06: AfN and Landcare Native Vegetation</u>			
	<u>NV-07 Bush Heritage Australia – Native Veg Assessment</u>			
	<u>NV-13 NSW BCT Native Veg Monitoring</u>			

NOTE for applicants considering F-02 and NV-07

Methods NV-07 or F-02 require approval from the method author and negotiation of a licencing fee. NSW Government have negotiated approvals and licence fees for Living Carbon projects. If you are interested in using one of these methods please talk to your on-ground support partner or email the Net Zero Land team requesting further information (netzero.land@environment.nsw.gov.au).

Chosen Environmental Assets (“Assets”), method(s) and accuracy level

In section 6.1 of your planting plan, provide information for each Asset Account you are planning to register as part of your project. An example of how to fill out this section is shown in Figure 5 below.

Figure 5: Example environmental asset account information

Environmental Asset Account 1:
Asset class: Vegetation
Environmental Asset: All vegetation in planted areas.
Sub-Asset(s): N/A
Method and Accuracy: NV-06: AfN and Landcare Native Vegetation 80%
Applicable planting areas: All
Environmental Asset Account 2:
Asset class: Fauna
Environmental Asset: Native woodland birds
Sub-Asset(s): N/A
Method and Accuracy: F-02: A native woodland bird assessment methodology for diverse regenerating farmlands 90%
Applicable planting areas: All

6.2 Specific method requirements

Specific information about the requirements of individual methods can be found on [AfN's website](#) and in the instructions document for each method (specifically the “Overview of Process” section). It is recommended that you read these instructions before deciding which method(s) you will use.

There is a section in the planting plan for you to record specific notes for your reference about the requirements for the method(s) you have chosen.

7 Project Delivery

This section provides timelines and activity schedules that you can follow when implementing your project both short and long-term. This will allow you to organise and prioritise tasks you need to achieve to meet project outcomes on time.

Revegetation projects require planning, site preparation, planting and long-term maintenance. All Environmental Accounts registered with Accounting for Nature (AfN) require the collection of data and site monitoring at regular intervals. Your revegetation project and Environmental Account will continue beyond the life of the grant project. This section focuses on three timelines:

1. Activity schedule specifically for Living Carbon grant (18 months)
2. Activity schedule for 1 to 5 years, including overlap with your Living Carbon grant
3. Long-term project and Environmental Account maintenance, 6 to 25 years

The information in sections 4 and 7.1 about project activities and their timing should be reflected in all three timelines.

The planting plan workbook contains outlines of all three schedules, for you to use as a starting point. You do not have to use these outlines. You can develop your activity schedules in your preferred format. Examples are also shown below.

7.1 Timing considerations

Note: There are no specific environmental thresholds specified for revegetation projects in the Riverina region. In the template, you may leave Table J blank, or you can complete it with information you find relevant and useful to you.

7.2 Project schedule for 18 months of the Living Carbon grant

This is a month-by-month activity schedule that you can follow when implementing your Living Carbon project. It will help you to prioritise your time, hire or purchase materials on time, and plan for upcoming actions. We have provided an outline of an 18-month timeline in the workbook in worksheet 7_Time0to18mnths, and an example in Example Table K below.

The outline divides tasks by relevance into three categories: revegetation tasks, carbon and environmental accounting, and Living Carbon grant administration. It includes:

- Activities and outcomes that **must** be completed as part of your Living Carbon project and when to complete them. You should include these in your 18-month schedule.

- A row for each **type of activity** you may do, for example site preparation or fencing. Replace these with the actual tasks you will complete and when you will complete them. For example, the one row for site preparation might be replaced with three rows: crash graze planting sites to reduce biomass (3-6 months before planting), ground preparation (1-3 months before), and weed control (one month before).

You may find the Brief activities schedule for revegetation in the Riverina, in Appendix B: Regional resources and information useful when creating your 18-month schedule. Remember under the Environmental Planting Pilot method, you must complete the planting for your ACCU Scheme registered project **within 18 months** of your carbon project being approved.

Note: You must plan to complete the planting for your Living Carbon project **within 12 months** of your project's start date so that you can include a 6-month stem survival rate report with your final progress report. If your project's circumstances change, you will be able to apply for an extension to complete your planting.

7.3 Project schedule for 1 to 5 years

The first five years of a carbon revegetation project are the most important to its long-term success. Project activities by quarter from planting onwards for 1 to 5 years should be added in Table L, understanding that a detailed plan for the first 18 months including pre-planting activities is in Table K. An example schedule is shown below in Example Table L.

7.4 Project schedule for 6 to 25 years

The maintenance workload of revegetation projects significantly reduces after about 5 years. You will need to complete regular actions to maintain your active carbon project and environmental account for at least 25 years. Project activities from 6 to 25 years should be added in Table M for each year. An example schedule is shown below in Example Table M.

Example Table K: Project schedule for 18 months of the Living Carbon grant period

Calendar month (October 2024 – March 2026)	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Revegetation activities																		
Order plants and materials; book contractors		x																
Fencing – Build new and repair old fences/gates					x	x												
Site preparation – Ripping						x												
Site preparation – Weed and pest control									x									
Planting										x								
Maintenance – Monitor soil moisture; water if needed									x		x		x		x		x	
Maintenance – Monitor tree guards; repair if needed											x		x		x		x	
Maintenance – Monitor tree damage; control pests											x		x		x		x	
Maintenance – Monitor survival rate; replace if need													x				x	
Maintenance – Monitor weeds; control if needed													x				x	
Carbon and environmental accounting																		
First carbon project report and earn ACCUs													x					
Register the Environmental Account		x																
Build the Environmental Account			x	x														
Certify the Environmental Account					x	x												
First Env. Account certification compliance report													x					
Living Carbon grant admin																		
Sign grant funding deed	x																	
Complete grantee survey		x														x		
Project case study																x		
Submit grant progress report		1				2						3				4		
Consider extra communications activity																x		

Example Table L: Project schedule for 1 to 5 years

Year	2026				2027				2028				2029				2030			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Revegetation activities																				
Monitor soil moisture; water if needed	x																			
Monitor tree guards; repair if needed	x	x	x	x	x	x	x	x												
Monitor tree damage; control pests if needed	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
Monitor survival rate; replace if needed	x		x		x		x		x		x									
Monitor weeds; control if needed	x		x		x		x													
Carbon and environmental accounting																				
Annual carbon project report and earn ACCUs			x				x				x				x				x	
Annual Env. Account cert. compliance report	x				x				x				x				x			
5-year audit of the Environmental Account																				x

Note: Assess impacts from natural hazard events (e.g. bushfires, floods) when needed, report, and take appropriate actions.

Example Table M: Project schedule for 6 to 25 years

Year (20xx)	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Carbon and environ. accounting																				
Annual carbon project report	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Annual Environmental Account certification compliance report	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
5-year audit of Environ. Account					x					x					x					x

Note: Assess impacts from natural hazard events (e.g. bushfires, floods) when needed, report, and take appropriate actions.

8 Budget and contractors

8.1 Budget

Complete your budget in Table N of the planting plan. An Example Table N is shown below.

The planting plan workbook has options to assist with budgeting. If you want to use it, you can list your project activities in worksheet 4_ProjectActivities in the workbook. If you then fill in the cost of each activity, and which sources of funding will pay for it, the values will automatically add up in worksheet 8_Budget. You can then copy Table N from your workbook into your planting plan. Figure How to use the Workbook to generate a project budget.

Materials or labour	Planting site(s)	Length (m)	Description and reason	Grant funds	Landowner cash co-contribution (\$)	Landowner in-kind (\$ equivalent)	Third party cash or in-kind contribution	Total line cost
Fencing materials	A, B	1400, 1500	New standard stock fence, 5 gates, no barbed wire. Enclose plantings + livestock paths.	\$8,700	\$8,700			\$17,400
Fencing materials	B	50	Extra ringlock and 10 long posts to patch creek crossings/wet areas.		\$800			\$800
Fencing labour	A, B, C		Grant to pay for new fencing installation, landowner in-kind hours for repairs	\$9,800		\$5,250	\$5,250	\$20,300
Fencing materials	A, C	1750	Materials to repair fencing: 200m Ringlock, 15 posts to repair/upgrade, wire for minor repairs		\$5,250			\$5,250
								\$0
								\$0
Grant funds must not exceed 50% of the total cost of the fence and may only be used to pay towards fencing costs that are equivalent to what a standard stock fence would cost.				\$18,500	\$14,750	\$5,250	\$5,250	\$43,750
				\$18,500.00		\$25,250.00		\$43,750.00

Activity	Activity Costs	Grant funding	Landowner cash co-contribution	Landowner in-kind (\$ equivalent)	Third Party	Total Activity
Site preparation	Soil preparation	\$0	\$0	\$0	\$0	\$0
Site preparation	Weed control	\$0	\$0	\$0	\$0	\$0
Site preparation	Other	\$0	\$0	\$0	\$0	\$0
Fencing	Fencing materials	\$8,700	\$14,750	\$0	\$0	\$23,450
Fencing	Fencing labour	\$9,800	\$0	\$5,250	\$5,250	\$20,300
Revegetation	Direct seeding (seeds and direct seeding)	\$0	\$0	\$0	\$0	\$0
Revegetation	Tube stock	\$0	\$0	\$0	\$0	\$0
Revegetation	Tree protection materials	\$0	\$0	\$0	\$0	\$0
Revegetation	Planting (including installation of tree guards etc.)	\$0	\$0	\$0	\$0	\$0
Maintenance & Report	Initial maintenance as per plan	\$0	\$0	\$0	\$0	\$0
Maintenance & Report	Initial monitoring and report	\$0	\$0	\$0	\$0	\$0
Admin	ACCU Scheme and Accounting for Nature (AfN) costs	\$5,000	\$0	\$0	\$0	\$5,000
Admin	Other admin	\$0	\$0	\$0	\$0	\$0
Sub total		\$23,500	\$14,750	\$5,250	\$5,250	\$48,750
Total		\$23,500		\$25,250		\$48,750



Figure 1 How to use the Workbook to generate a project budget.

below shows how this works.

In the top table, left hand side, four fencing activities have been listed. On the right-hand side, the cost of each activity has been entered by funding source. The total cost by funding source is calculated at the bottom (highlighted in the red box). The cost for the fencing activities,

split into materials and labour, is now automatically calculated in worksheet 8_Budget sheet (highlighted in the blue box).

Example Table N: Planting plan budget

Project stage	Activity Costs	Grant funding	Landowner cash co-contribution	Landowner In-kind	Third party contribution	Total Cost
Site preparation	Soil preparation	\$11,000				\$11,000
	Weed control		\$2,500			\$2,500
Fencing	Fencing materials	\$8,500				\$8,500
	Fencing labour			\$8,500		\$8,500
Revegetation	Direct seeding (seeds and direct seeding)					
	Tube stock	\$12,500				\$12,500
	Tree protection materials	\$4,000				\$4,000
	Planting labour (including augering, installation of tree guards etc.)	\$9,000			\$2,000	\$11,000
Maintenance and Report	Initial maintenance as per plan			\$13,000		\$13,000
	Initial monitoring and report			\$2,000		\$2,000
Admin	ACCU Scheme and Accounting for Nature (AfN) costs	\$5,000	\$4,000	\$1,000		\$10,000
	Other			\$1,000		\$1,000
	Sub total	\$50,000	\$6,500	\$25,500	\$2,000	\$84,000
	Budget total	\$50,000			\$34,000	\$84,000

Note: You are required to provide two quotes for each activity cost in your planting plan budget for which you seek grant funding of more than \$5000. If you are unable to provide two quotes, you must provide a justification. NSW Government may accept the justification at its full discretion.

Please check all calculations to confirm that the values in your budget are correct.

8.2 Nominating contractors

Contractors must be qualified, licensed, insured and experienced to take on the works you are contracting them for. You are required to upload and attach contractor quotes in SmartyGrants when completing your grant application. You can keep information about your chosen contractors in the workbook for your own reference in sheet 0_Contractors.

9 Landholder commitment and on-ground support partner endorsement

Landowner commitment

At the end of the planting plan, in section 9, there is a commitment statement that must be signed by the legal owner of the property or their appointed representative. The person signing on behalf of the property owner should understand the plan to confirm that it is accurate, including all the values given for planting areas, materials and budgets. They should also believe that the plan is achievable and will deliver on the aims of the Living Carbon grant program, specifically a significant amount of carbon sequestration and improvements in biodiversity. Also, assuming the project is supported by the Living Carbon grant, they can provide the additional resources needed to implement the plan.

On-ground support partner endorsement

The planting plan must be developed with guidance from the on-ground support partner, Riverina Local Land Services. Riverina Local Land Services has dedicated staff to support Living Carbon projects. A representative of this team must have been to the property and be familiar with the project area and surrounding landscape. Riverina Local Land Services staff must confirm and agree that the contents of the plan are accurate, that the proposed activities and budget is realistic, based on their knowledge of the project area and experience with similar projects. They will also review the expected outcomes from the project and assess the likelihood of meeting the objectives of the Living Carbon grant, such as improving the habitat for a specific threatened species that can be measured and proven.

For further information please contact:

Kate Jenkins

Land Services Officer NRM & Living Carbon Project Officer

M 0448 222 954 **E** kate.jenkins@lls.nsw.gov.au

Note: If the on-ground partner does not agree with any element of the plan they are not obligated to sign it and you will not be able to apply for a Living Carbon grant. It is strongly recommended that you talk with your on-ground support partner about your proposed project early in the development of the plan, to help ensure that their representative will agree to endorse the final plan.

10 Appendix

Appendix A: Terms and definitions

The following terms are used throughout the planting plan guide and planting plan.

Term	Definition
Accounting for Nature Ltd (AfN)	An independent not-for-profit organisation that administers the Accounting for Nature® Framework ('the Framework'). The Framework provides a system for measuring, verifying, certifying, and publicly reporting Environmental Condition Accounts ('Environmental Accounts').
Accredited AfN method	Refers to any method listed on Accounting for Nature's website Method Catalogue . Accredited Methods provide detailed instructions on how to measure the Condition of a specific Environmental Asset, at a particular Accuracy Level, at a particular Scale, and to support a specific Purpose and/or Claim.
ACCU	Australian Carbon Credit Unit
ACCU Scheme	ACCU Scheme (formerly known as the Emissions Reduction Fund) is a voluntary scheme that provides incentives for organisations and individuals to adopt new practices and technologies to reduce or remove carbon emissions from the atmosphere. It is administered by the Clean Energy Regulator (CER).
Applicant	An entity referred to in these guidelines that applies for a Living Carbon grant
Application	Submission of an application form and other required documents for a Living Carbon grant
Asset Account	An AfN Environmental Asset account (Asset Account) individually reflects the condition of one Environmental Asset as specified by a single Accredited method
Carbon project	Means verified carbon sequestration activities, registered with the ACCU Scheme, which reduce, avoid, or remove greenhouse gas

	emissions from the atmosphere and contribute to the mitigation of climate change. Carbon projects eligible for funding under Living Carbon must be registered under the Environmental Planting Pilot method, however an alternative equivalent method may also be accepted if the EPP method becomes unavailable.
Clean Energy Regulator (CER)	Administer schemes legislated by the Australian Government for measuring, managing, reducing or offsetting Australia's carbon emissions. This includes the ACCU Scheme.
Carbon estimation area (CEA)	The area(s) within a carbon project registered under the ACCU Scheme where the carbon management activity (such as storing carbon in trees in an environmental planting project) takes place. The Total carbon estimation area is the area of all CEAs combined.
Co-benefits	The additional benefits associated with carbon projects. This may include environmental benefits, such as enhanced biodiversity, economic gains from increased productivity, increased community resilience, and Aboriginal cultural co-benefits
Co-funding	Financial support of a successful project provided by the Department and a private sector entity or entities
Corporations Act	Corporations Act 2001 (Commonwealth)
DCCEEW	The NSW Department of Climate Change, Energy, the Environment and Water
Environmental Account	As in an Environmental Account registered with Accounting for Nature. An Environmental Account is a single registered environmental accounting project that reports on the condition of one or more Environmental Assets within a defined boundary (Environmental Account boundary). Environmental Accounts are comprised of one or more individual Environmental Asset Accounts (contained within an Asset Account Boundary). Under the Framework an Environmental Account includes all Environmental Account data and the Information Statement.
Environmental Asset "Asset"	Any biophysical features in nature that can be measured. Environmental Assets can be specific, such as an individual fauna species, or broad such as a group of fauna species or an ecosystem.

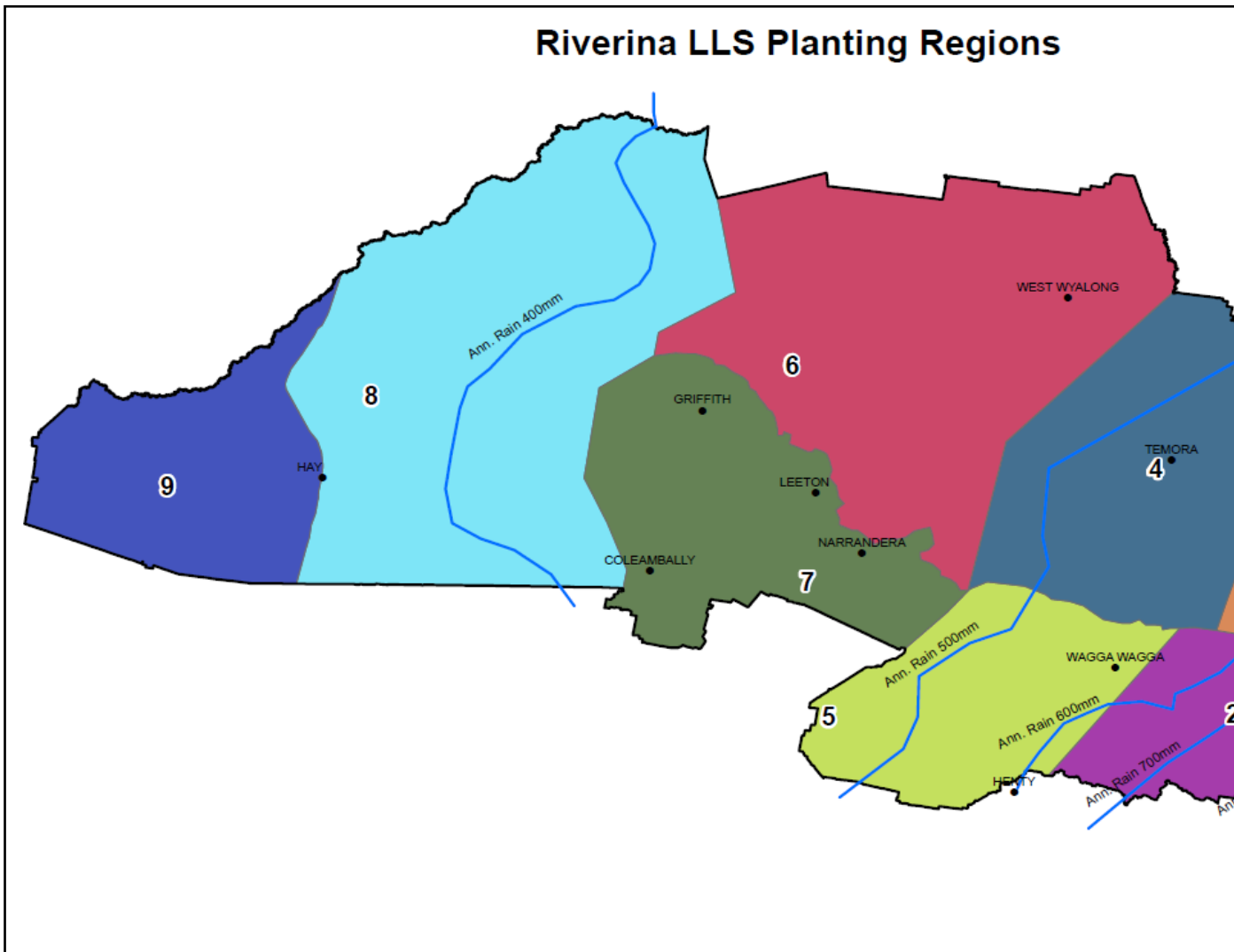
	Environmental assets generally fall into one of the following Asset Classes: fauna, vegetation, soil, water, and ecosystems.
Guidelines	Approved framework for the operation and administration of Living Carbon funding. NOTE: The grant guidelines will be amended and updated by NSW Department of Climate Change, Energy, the Environment and Water as needed to be current and accurate
Ineligible expenditure	Expenditure of the kind defined as ineligible in section 2.8.2 Funding inclusions and exclusions of the Living Carbon grant guidelines
Living Carbon	Means the grant program being developed by NSW Department of Climate Change, Energy, the Environment and Water to support landholders to implement and demonstrate carbon projects with biodiversity benefits
Minister	The Minister with responsibility for Living Carbon funding, which at the time of publishing for these guidelines is the NSW Minister for Climate Change, Minister for Energy, Minister for the Environment, Minister for Heritage
NRM Region	Natural Resource Management region as outlined on NRM Regions Map – NRM Regions Australia . Landholders in NSW can find what NRM region they part of here: Look up your Local Land Services region – Local Land Services .
NSW	The State of New South Wales
On-ground support partner	NSW Department of Climate Change, Energy, the Environment and Water is working with two key partners: NSW Local Land Services (North Coast and Riverina regions), and the NSW Koala Strategy (Mid Coast region). These partners will play a key role in assisting applicants in eligible regions with their pre-application requirements and will be involved during project implementation to ensure planting work is done in-line with endorsed planting plans.
Planting site or individual planting site	A defined area where planting is occurring as part of a project. A project may comprise of one or more individual planting sites. Note, there may be conditions for what the minimum area of a planting site may be in some regions. Each planting area should be assigned a unique number, letter or name, to make it easy to refer to.

Project	A project described in an application for funding under Living Carbon. A project may be comprised of one or more individual planting sites.
Smarty Grants	The Department's online grant administration system provided by Our Community Pty Ltd
Threatened Ecological Community (TEC)	An ecological community becomes listed as threatened when it becomes at risk of extinction. An ecological community may be listed as vulnerable, endangered or critically endangered depending on the level of threat and risk of its collapse. A community can be listed in NSW (under the <i>Biodiversity Conservation Act 2016</i>) or nationally (under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>).
Threatened species	A native species listed as threatened with extinction locally or regionally (under a Regional Natural Resources Management Plan), state-wide (under the <i>NSW Biodiversity Conservation Act 2016</i>), nationally (under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>) or internationally (under the International Union for Conservation of nature IUCN). This includes threatened populations of species.

Appendix B: Regional resources and information

This section contains the resources listed below (click on the text to go the information):

- Map of Riverina's planting regions



- Species planting lists by planting
 - Planting Zone 1
 - Planting Zone 2
 - Planting Zone 3
 - Planting Zone 4
 - Planting Zone 5
 - Planting Zones 6 and 7
 - Planting Zones 8 and 9
- Brief activities schedule for revegetation in the Riverina

Map of Riverina's planting regions

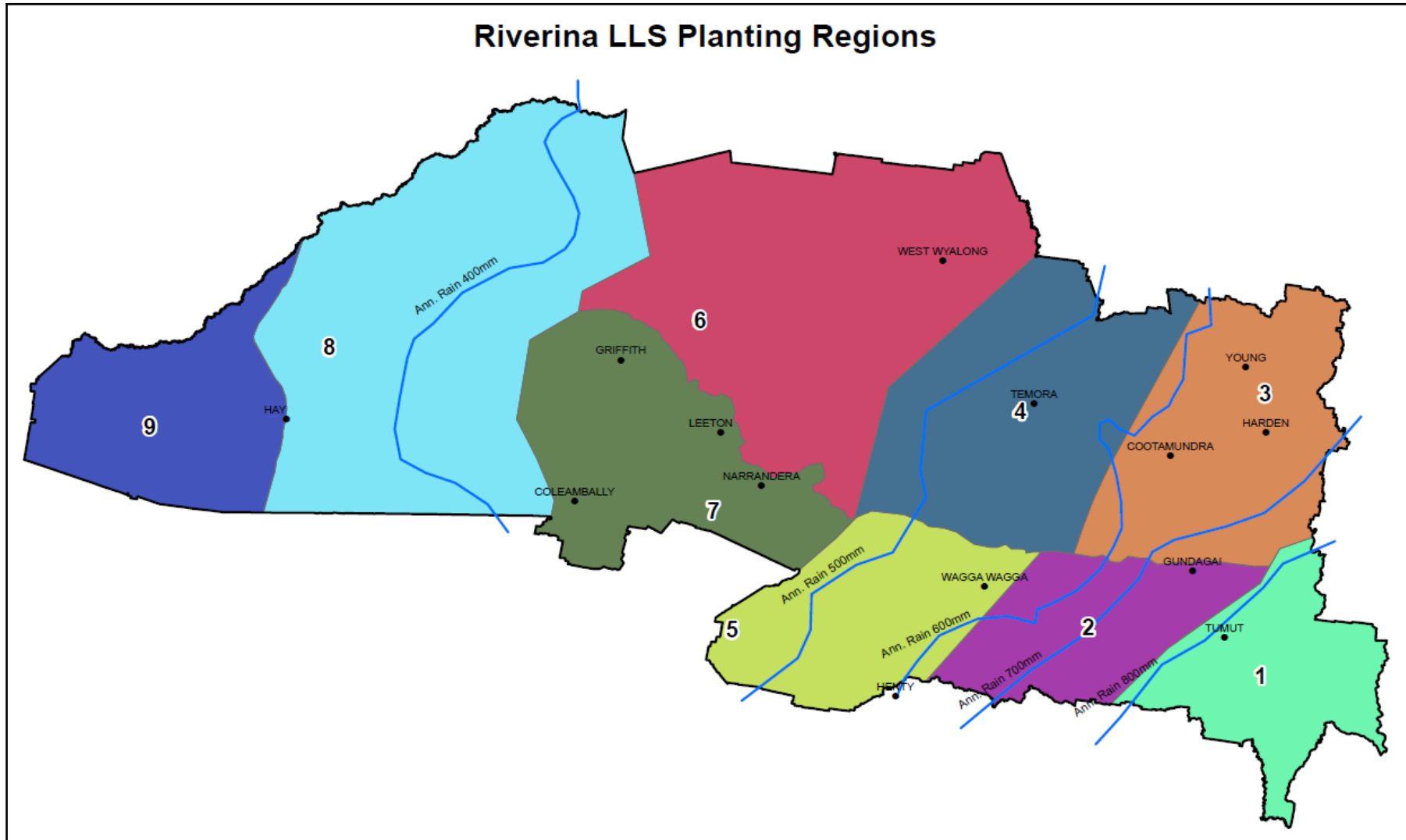


Figure 2: Riverina planting regions

Species planting lists by planting zones

Planting Zone 1

Table B1: Species list for Planting Zone 1

Species suitability for Landscape positions for the upper region of the Murrumbidgee Catchment, Planting Zone 1. All species grow to above 2 metres tall.

Rocky hilltops/Upper slopes/Recharge	
Scientific name	Common name
Trees	
Acacia implexa	Hickory wattle
Acacia penninervis	Mountain hickory
Brachychiton populneus	Kurrajong
Eucalyptus albens	White box
Eucalyptus blakelyi	Blakely's red gum
Eucalyptus dalrympleana	Mountain gum
Eucalyptus dives	Broad-leaved Peppermint
Eucalyptus mannifera	Brittle gum
Eucalyptus macrorhyncha	Red stringybark
Eucalyptus pauciflora	Snow gum
Eucalyptus polyanthemos	Red box
Eucalyptus robertsonii	Robertson's peppermint
Eucalyptus rossii	Scribbly gum
Eucalyptus stellulata	Black sallee
Shrubs	
Acacia buxifolia	Box leaf wattle
Acacia decora	Western silver wattle
Acacia genistifolia	Spreading wattle
Acacia rubida	Red-stem Wattle
Acacia verniciflua	Varnish wattle
Banksia marginata	Silver banksia
Callistemon pallidus	Lemon bottlebrush
Midslope/Lower slope/Dry gullies	
Scientific name	Common name
Trees	
Acacia dealbata	Silver wattle
Acacia implexa	Hickory wattle
Acacia mearnsii	Black wattle
Acacia melanoxylon	Blackwood
Acacia penninervis	Mountain hickory
Eucalyptus albens	White box
Eucalyptus blakelyi	Blakely's red gum
Eucalyptus bridgesiana	Apple box

<i>Eucalyptus dives</i>	Broad-leaved Peppermint
<i>Eucalyptus dalrympleana</i>	Mountain gum
<i>Eucalyptus melliodora</i>	Yellow box
<i>Eucalyptus robertsonii</i>	Robertson's peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Eucalyptus stellulata</i>	Black sallee
<i>Eucalyptus viminalis</i>	Ribbon gum
Shrubs	
<i>Acacia decora</i>	Western silver wattle
<i>Acacia deanei</i>	Deanne's wattle
<i>Acacia rubida</i>	Red-stem Wattle
<i>Acacia paradoxa</i>	Kangaroo thorn
<i>Acacia verniciflua</i>	Varnish wattle
<i>Bursaria lasiophylla</i>	Hairy bursaria
<i>Bursaria spinosa</i>	Native blackthorn / sweet bursaria
<i>Dodonaea viscosa</i> ssp <i>angustissima</i>	Narrow-leaf Hopbush
<i>Kunzea ericoides</i>	Burgan
Riparian/Periodically water-logged	
Scientific name	Common name
Trees	
<i>Acacia dealbata</i>	Silver wattle
<i>Acacia melanoxylon</i>	Blackwood
<i>Casuarina cunninghamiana</i>	River She-oak
<i>Eucalyptus camaldulensis</i>	River red gum
<i>Eucalyptus bridgesiana</i>	Apple box
<i>Eucalyptus camphora</i>	Mountain swamp gum
<i>Eucalyptus ovata</i>	Swamp gum
<i>Eucalyptus stellulata</i>	Black sallee
<i>Eucalyptus viminalis</i>	Ribbon gum
Shrubs	
<i>Acacia deanei</i>	Deanne's wattle
<i>Bursaria lasiophylla</i>	Hairy bursia
<i>Callistemon sieberi</i>	River bottlebrush
<i>Grevillea lanigera</i>	Woolly grevillea
<i>Hakea microcarpa</i>	Small fruited hakea
<i>Kunzea ericoides</i>	Burgan
<i>Leptospermum myrtifolium</i>	Swamp Tea-tree
<i>Leptospermum obovatum</i>	River Tea-tree
Saline Discharge Sites	
Scientific name	Common name
Trees	
<i>Casuarina cunninghamiana</i>	River She-oak
<i>Allocasuarina glauca</i>	Swamp She-oak
<i>Allocasuarina verticillata</i>	Drooping She-oak

Eucalyptus camaldulensis	River red gum
Eucalyptus occidentalis	Flat topped yate
Shrubs	
Acacia salicina	Cooba/willow wattle
Atriplex nummularia	Old man saltbush
Melaleuca lanceolata	Dryland Tea-tree
Melaleuca styphelioides	Prickly leaf paperbark
Senna artemisioides ssp. filifolia	Punty bush
Frost Hollows	
Scientific name	Common name
Trees	
Eucalyptus aggregata	Black gum
Eucalyptus stellulata	Black sallee
Eucalyptus pauciflora	Snow gum

Planting Zone 2

Table B2: Species list for Planting Zone 2

Species suitability for Landscape positions for the upper & mid-region in the Murrumbidgee Catchment, Planting Zone 2.

Rocky hilltops/Upper slopes/Recharge	
Scientific name	Common name
Trees	
Acacia doratoxylon	Currawang
Acacia implexa	Hickory wattle
Allocasuarina verticillata	Drooping She-oak
Brachychiton populneus	Kurrajong
Eucalyptus albens	White box
Eucalyptus blakelyi	Blakely's red gum
Eucalyptus dealbata	Tumbledown red gum
Eucalyptus goniocalyx	Long-leaf Box
Eucalyptus macrorhyncha	Red stringybark
Eucalyptus mannifera	Brittle gum
Eucalyptus polyanthemos	Red box
Eucalyptus rossii	Scribbly gum
Eucalyptus sideroxylon	Red ironbark / mugga
Shrubs	
Acacia buxifolia	Box-leaf Wattle
Acacia decora	Western silver wattle
Acacia genistifolia	Spreading wattle
Acacia rubida	Red-stem Wattle
Banksia marginata	Silver banksia
Callistemon pallidus	Lemon bottlebrush
Midslope/Lower slope/Dry gullies	

Scientific name		Common name	
Trees			
Acacia implexa		Hickory wattle	
Acacia mearnsii		Late black wattle	
Allocasuarina luehmannii		Buloke	
Eucalyptus blakelyi		Blakely's red gum	
Eucalyptus bridgesiana		Apple box	
Eucalyptus melliodora		Yellow box	
Eucalyptus microcarpa		Grey box	
Eucalyptus viminalis		Ribbon gum	
Shrubs			
Acacia decora		Western silver wattle	
Acacia deanei		Deane's wattle	
Acacia hakeoides		Hakea wattle	
Acacia montana		Mallee wattle	
Acacia rubida		Red-stem Wattle	
Acacia paradoxa		Kangaroo thorn	
Acacia verniciflua		Varnish wattle	
Banksia marginata		Silver banksia	
Bursaria spinosa		Native blackthorn / sweet bursaria	
Dodonaea viscosa subsp. angustissima		Narrow leaf hop bush	
Dodonaea viscosa subsp. cuneata		Wedge-leaf Hop Bush	
Dodonaea viscosa subsp. purpurea		Purple hop bush	
Hakea tephrosperma		Hooked needlewood	
Kunzea ericoides		Burgan	
Riparian/Periodically water-logged			
Scientific name		Common name	
Trees			
Acacia dealbata		Silver wattle	
Acacia implexa		Hickory wattle	
Acacia melanoxyton		Blackwood	
Casuarina cunninghamiana		River She-oak	
Eucalyptus bridgesiana		Apple box	
Eucalyptus camaldulensis		River red gum	
Eucalyptus camphora		Mountain swamp gum	
Shrubs			
Acacia deanei		Deane's wattle	
Acacia pravissima		Oven's wattle	
Callistemon sieberi		River bottlebrush	
Kunzea ericoides		Burgan	
Myoporum montanum		Western boobialla	
Saline Discharge Sites			

Scientific name	Common name
Trees	
Casuarina cunninghamiana	River She-oak
Allocasuarina glauca	Swamp She-oak
Allocasuarina verticillata	Drooping She-oak
Eucalyptus camaldulensis	River red gum
Eucalyptus occidentalis	Flat topped yate
Shrubs	
Acacia salicina	Cooba/Willow wattle
Atriplex nummularia	Old man saltbush
Melaleuca lanceolata	Dryland Tea-tree
Melaleuca styphelioides	Prickly leaf paperbark
Senna artemisioides ssp. filifolia	Punty bush

Planting Zone 3

Table B3: Species list for Planting Zone 3

Species suitability for Landscape positions for the upper & mid-region in the Murrumbidgee Catchment, Planting Zone 3.

Rocky hilltops/Upper slopes/Recharge	
Scientific name	Common name
Trees	
Acacia doratoxylon	Currawang
Acacia implexa	Hickory wattle
Allocasuarina verticillata	Drooping She-oak
Brachychiton populneus	Kurrajong
Eucalyptus albens	White box
Eucalyptus blakelyi	Blakely's red gum
Eucalyptus dealbata	Tumbledown red gum
Eucalyptus goniacalyx	Long-leaf Box
Eucalyptus macrorhyncha	Red stringybark
Eucalyptus mannifera	Brittle gum
Eucalyptus polyanthemus	Red box
Eucalyptus rossii	Scribbly gum
Eucalyptus sideroxylon	Red ironbark / mugga
Shrubs	
Acacia buxifolia	Box-leaf Wattle
Acacia decora	Western silver wattle
Acacia genistifolia	Spreading wattle
Acacia rubida	Red-stem Wattle
Banksia marginata	Silver banksia
Callistemon pallidus	Lemon bottlebrush
Midslope/Lower slope/Dry gullies	

Scientific name		Common name	
Trees			
Acacia implexa		Hickory wattle	
Acacia mearnsii		Late black wattle	
Allocasuarina luehmannii		Buloke	
Allocasuarina verticillata		Drooping She-oak	
Brachychiton populneus		Kurrajong	
Eucalyptus albens		White box	
Eucalyptus blakelyi		Blakely's red gum	
Eucalyptus bridgesiana		Apple box	
Eucalyptus melliodora		Yellow box	
Eucalyptus microcarpa		Grey box	
Eucalyptus viminalis		Ribbon gum	
Shrubs			
Acacia dealbata		Silver wattle	
Acacia decora		Western silver wattle	
Acacia deanei		Deane's wattle	
Acacia hakeoides		Hakea wattle	
Acacia montana		Mallee wattle	
Acacia rubida		Red-stem Wattle	
Acacia paradoxa		Kangaroo thorn	
Acacia penninervis		Mountain hickory	
Acacia verniciflua		Varnish wattle	
Banksia marginata		Silver banksia	
Bursaria spinosa		Native blackthorn / sweet bursaria	
Dodonaea viscosa subsp. Angustissima		Narrow leaf hop bush	
Dodonaea viscosa subsp. cuneata		Wedge-leaf Hop Bush	
Dodonaea viscosa subsp. purpurea		Purple hop bush	
Eremophila longifolia		Long-leaf Emu Bush	
Hakea tephrosperma		Hooked needlewood	
Kunzea ericoides		Burgan	
Riparian/Periodically water-logged			
Scientific name		Common name	
Trees			
Acacia dealbata		Silver wattle	
Acacia implexa		Hickory wattle	
Acacia melanoxylon		Blackwood	
Acacia vestita		Hairy wattle	
Allocasuarina verticillata		Drooping She-oak	
Casuarina cunninghamiana		River She-oak	
Eucalyptus bridgesiana		Apple box	

<i>Eucalyptus camaldulensis</i>	River red gum
<i>Eucalyptus camphora</i>	Mountain swamp gum
Shrubs	
<i>Acacia buxifolia</i>	Box leaved wattle
<i>Acacia deanei</i>	Deane's wattle
<i>Acacia haheoides</i>	Hakea wattle
<i>Acacia pravissima</i>	Oven's wattle
<i>Callistemon sieberi</i>	River bottlebrush
<i>Kunzea ericoides</i>	Burgan
<i>Myoporum montanum</i>	Western boobialla
Saline Discharge Sites	
Scientific name	Common name
Trees	
<i>Casuarina cunninghamiana</i>	River She-oak
<i>Allocasuarina glauca</i>	Swamp She-oak
<i>Eucalyptus camaldulensis</i>	River red gum
<i>Eucalyptus occidentalis</i>	Flat topped yate
<i>Eucalyptus ovata</i>	Swamp gum
Shrubs	
<i>Acacia salicina</i>	Cooba/Willow wattle
<i>Atriplex nummularia</i>	Old man saltbush
<i>Melaleuca lanceolata</i>	Dryland Tea-tree
<i>Melaleuca halmaturorum</i>	Salt paperbark
<i>Melaleuca styphelioides</i>	Prickly leaf paperbark
<i>Senna artemisioides</i> ssp. <i>filifolia</i>	Punty bush

Planting Zone 4

Table B4: Species list for Planting Zone 4

Species suitability for landscape positions for the mid-region in the Murrumbidgee Catchment, Planting Zone 4.

Rocky hilltops/Upper slopes/Recharge	
Scientific name	Common name
Trees	
<i>Acacia doratoxylon</i>	Currawang
<i>Acacia implexa</i>	Hickory wattle
<i>Allocasuarina verticillata</i>	Drooping She-oak
<i>Brachychiton populneus</i>	Kurrajong
<i>Callitris endlicheri</i>	Black cypress pine
<i>Callitris glaucophylla</i>	White cypress pine
<i>Eucalyptus albens</i>	White box
<i>Eucalyptus blakelyi</i>	Blakely's red gum

<i>Eucalyptus dealbata</i>	Tumbledown red gum
<i>Eucalyptus dwyeri</i>	Hill gum
<i>Eucalyptus goniocalyx</i>	Long-leaf Box
<i>Eucalyptus polyanthemus</i>	Red box
<i>Eucalyptus rossii</i>	Scribbly gum
<i>Eucalyptus sideroxylon</i>	Red ironbark / mugga
Shrubs	
<i>Acacia buxifolia</i>	Box-leaf Wattle
<i>Acacia decora</i>	Western silver wattle
<i>Acacia genistifolia</i>	Spreading wattle
<i>Acacia paradoxa</i>	Kangaroo thorn
<i>Acacia rubida</i>	Red-stem Wattle
<i>Banksia marginata</i>	Silver banksia
<i>Callistemon pallidus</i>	Lemon bottlebrush
Midslope/Lower slope/Dry gullies	
Scientific name	Common name
Trees	
<i>Acacia implexa</i>	Hickory wattle
<i>Acacia mearnsii</i>	Late black wattle
<i>Acacia montana</i>	Mallee wattle
<i>Acacia lanigera</i>	Woolly wattle
<i>Allocasuarina luehmannii</i>	Buloke
<i>Brachychiton populneus</i>	Kurrajong
<i>Callitris glaucophylla</i>	White cypress pine
<i>Casuarina cristata</i>	Belah
<i>Eucalyptus albens</i>	White box
<i>Eucalyptus blakelyi</i>	Blakely's red gum
<i>Eucalyptus bridgesiana</i>	Apple box
<i>Eucalyptus melliodora</i>	Yellow box
<i>Eucalyptus microcarpa</i>	Grey box
<i>Eucalyptus viminalis</i>	Ribbon gum
Shrubs	
<i>Acacia decora</i>	Western silver wattle
<i>Acacia deanei</i>	Deane's wattle
<i>Acacia hakeoides</i>	Hakea wattle
<i>Acacia montana</i>	Mallee wattle
<i>Acacia rubida</i>	Red-stem Wattle
<i>Acacia paradoxa</i>	Kangaroo thorn
<i>Acacia verniciflua</i>	Varnish wattle
<i>Banksia marginata</i>	Silver banksia
<i>Bursaria spinosa</i>	Native blackthorn / sweet bursaria
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>	Narrow leaf hop bush

<i>Dodonaea viscosa</i> subsp. <i>cuneata</i>	Wedge-leaf Hop Bush
<i>Dodonaea viscosa</i> subsp. <i>purpurea</i>	Purple hop bush
<i>Hakea tephrosperma</i>	Hooked needlewood
<i>Kunzea ericoides</i>	Burgan
Riparian/Periodically water-logged	
Scientific name	Common name
Trees	
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia implexa</i>	Hickory Wattle
<i>Acacia melanoxylon</i>	Blackwood
<i>Casuarina cristata</i>	Belah
<i>Casuarina cunninghamiana</i>	River She-oak
<i>Eucalyptus blakelyi</i>	Blakely's red gum
<i>Eucalyptus bridgesiana</i>	Apple box
<i>Eucalyptus camaldulensis</i>	River red gum
<i>Eucalyptus camphora</i>	Mountain swamp gum
<i>Eucalyptus melliodora</i>	Yellow box
<i>Eucalyptus microcarpa</i>	Grey box
Shrubs	
<i>Acacia deanei</i>	Deane's wattle
<i>Acacia pravissima</i>	Oven's wattle
<i>Callistemon sieberi</i>	River bottlebrush
<i>Kunzea ericoides</i>	Burgan
<i>Myoporum montanum</i>	Western boobialla
Saline Discharge Sites	
Scientific name	Common name
Trees	
<i>Casuarina cunninghamiana</i>	River She-oak
<i>Allocasuarina glauca</i>	Swamp She-oak
<i>Allocasuarina luehmannii</i>	Buloke
<i>Allocasuarina verticillata</i>	Drooping She-oak
<i>Eucalyptus camaldulensis</i>	River red gum
<i>Eucalyptus occidentalis</i>	Flat topped yate
Shrubs	
<i>Acacia salicina</i>	Cooba/Willow wattle
<i>Atriplex nummularia</i>	Old man saltbush
<i>Melaleuca lanceolata</i>	Dryland Tea-tree
<i>Melaleuca styphelioides</i>	Prickly leaf paperbark
<i>Senna artemisioides</i> ssp. <i>filifolia</i>	Punty bush

Planting Zone 5

Table B5: Species list for Planting Zone 5

Species suitability for Landscape positions for the mid-region in the Murrumbidgee Catchment, Planting Zone 5.

Rocky hilltops/Upper slopes/Recharge	
Scientific name	Common name
Trees	
Acacia doratoxylon	Currawang
Acacia implexa	Hickory wattle
Allocasuarina verticillata	Drooping She-oak
Brachychiton populneus	Kurrajong
Eucalyptus albens	White box
Eucalyptus blakelyi	Blakely's red gum
Eucalyptus dealbata	Tumbledown red gum
Eucalyptus goniacalyx	Long-leaf Box
Eucalyptus macrorhyncha	Red stringybark
Eucalyptus polyanthemus	Red box
Eucalyptus rossii	Scribbly gum
Eucalyptus sideroxylon	Red ironbark / mugga
Shrubs	
Acacia buxifolia	Box-leaf Wattle
Acacia decora	Western silver wattle
Acacia genistifolia	Spreading wattle
Acacia paradoxa	Kangaroo thorn
Acacia rubida	Red-stem Wattle
Banksia marginata	Silver banksia
Brachyloma daphnoides	Daphne heath
Callistemon pallidus	Lemon bottlebrush
Midslope/Lower slope/Dry gullies	
Scientific name	Common name
Trees	
Acacia implexa	Hickory wattle
Allocasuarina luehmannii	Buloke
Callitris glaucophylla	White cypress pine
Eucalyptus albens	White box
Eucalyptus blakelyi	Blakely's red gum
Eucalyptus bridgesiana	Apple box
Eucalyptus melliodora	Yellow box
Eucalyptus microcarpa	Grey box
Brachychiton populneus	Kurrajong
Shrubs	

Acacia decora	Western silver wattle
Acacia deanei	Deane's wattle
Acacia hakeoides	Hakea wattle
Acacia montana	Mallee wattle
Acacia pycnantha	Golden wattle
Acacia rubida	Red-stem Wattle
Acacia paradoxa	Kangaroo thorn
Acacia verniciflua	Varnish wattle
Banksia marginata	Silver banksia
Bursaria spinosa	Native blackthorn / sweet bursaria
Dodonaea viscosa subsp. cuneata	Wedge-leaf Hop Bush
Dodonaea viscosa subsp. angustissima	Narrow leaf hop bush
Kunzea ericoides	Burgan
Hakea tephrosperma	Hooked needlewood
Riparian/Periodically water-logged	
Scientific name	Common name
Trees	
Acacia dealbata	Silver wattle
Acacia implexa	Hickory wattle
Acacia melanoxylon	Blackwood
Casuarina cunninghamiana	River She-oak
Eucalyptus bridgesiana	Apple box
Eucalyptus camphora	Mountain swamp gum
Eucalyptus camaldulensis	River red gum
Eucalyptus melliodora	Yellow box
Shrubs	
Acacia deanei	Deane's wattle
Acacia pravissima	Oven's wattle
Acacia pycnantha	Golden wattle
Callistemon sieberi	River bottlebrush
Eremophila deserti	Turkeybush
Kunzea ericoides	Burgan
Leptospermum continentale, syn L. juniperinum	Prickley tea-tree
Myoporum montanum	Western boobialla
Saline Discharge Sites	
Scientific name	Common name
Trees	
Casuarina cunninghamiana	River She-oak
Allocasuarina glauca	Swamp She-oak
Allocasuarina luehmannii	Buloke
Allocasuarina verticillata	Drooping She-oak
Eucalyptus camaldulensis	River red gum

Eucalyptus occidentalis	Flat topped yate
Shrubs	
Acacia salicina	Cooba/willow wattle
Atriplex nummularia	Old man saltbush
Melaleuca lanceolata	Dryland Tea-tree
Melaleuca styphelioides	Prickly leaf paperbark
Senna artemisioides ssp. filifolia	Punty bush

Planting Zones 6 and 7

Table B6: Species list for Planting Zones 6 and 7

Species suitability for Landscape positions for the lower region in the Murrumbidgee Catchment, Planting Zones 6 and 7.

Boree Saltbush-Woodland Open Plains - Clay/Clay loams	
Scientific name	Common name
Trees	
Acacia salicina	Cooba
Acacia pendula	Boree
Acacia stenophylla	River cooba
Acacia homalophylla	Yarran
Pittosporum phylliraeoides	Butterbush
Small Trees and Shrubs	
Acacia oswaldii	Miljee
Senna artemisioides sub sp circinnata	Spring pod senna
Senna artemisioides sp filifolia	Punty bush
Acacia hakoides	Western black wattle
Atriplex nummularia	Old man saltbush
Callistemon brachyandrus	Prickly bottlebrush
Black Box Woodland Depressions and Creeks - Heavy clay soils	
Scientific name	Common name
Trees	
Eucalyptus largiflorens	Black box
Acacia salicina	Cooba
Acacia stenophylla	River cooba
Casuarina cristata	Belah
Acacia pendula	Boree
Pittosporum phylliraeoides	Butterbush
Small Trees and Shrubs	
Acacia oswaldii	Miljee
Atriplex nummularia	Old man saltbush
Muehlenbeckia florulenta	Lignum

Chenopodium nitrariaceum	Nitre goosefoot
White Cypress Pine Woodland Sandhill - Coarse Sandy Soils	
Scientific Name	Common name
Trees	
Callitris glaucophylla	White cypress pine
Hakea tephrosperma	Hooked needlewood
Allocasuarina luehmannii	Bull oak
Acacia salicina	Cooba
Eucalyptus melliodora	Yellow box
Pittosporum phylliraeoides	Butterbush
Eucalyptus microcarpa	Grey box
Acacia pendula	Boree
Acacia homalophylla	Yarran
Brachychiton populneus	Kurrajong
Small Trees and Shrubs	
Acacia oswaldii	Miljee
Acacia brachybotrya	Grey wattle
Dodonea viscosa subsp angustissima	Narrowleaf hopbush
Dodonea viscosa subsp cuneata	Wedge-leaf Hop Bush
Acacia deanei	Deanne's wattle
Senna artemisioides sp filifolia	Punty bush
Atriplex nummularia	Old man saltbush
Eremophila longifolia	Emu bush
River Red Gum Watercourses/Floodpains - Grey Clay	
Scientific name	Common name
Trees	
Eucalyptus camaldulensis	River red gum
Eucalyptus largiflorens	Black box
Acacia salicina	Cooba
Acacia stenophylla	River cooba
Casuarina cunninghamiana	River she oak
Casuarina cristata	Belah
Small Trees and Shrubs	
Pittosporum phylliraeoides	Butterbush
Acacia oswaldii	Miljee
Atriplex nummularia	Old man saltbush
Muehlenbeckia florulenta	Lignum
Chenopodium nitrariaceum	Nitre goosefoot

Currawang/Dywer's Gum Woodlands Gravelly Ridges - Shallow skeletal Soils	
Scientific name	Common name
Trees	
Acacia doratoxylon	Currawang
Eucalyptus dyweri	Dywer's mallee gum
Callitris glaucophylla	White cypress pine
Small Trees and Shrubs	
Pittosporum phylliraeoides	Butterbush
Acacia calamfolia	Wallowa
Dodonea viscosa	Broadleaf hophbush
Cassinia laevis	Cough bush
Bimble Box/White Cypress Pine Woodlands Level to undulating ground - Red earths of clay loam/sandy loam	
Scientific name	Common name
Trees	
Eucalyptus populnea	Bimble box
Eucalyptus microcarpa	Grey box
Callitris glaucophylla	White cypress pine
Acacia salicina	Cooba
Allocasuarina luehmannii	Bull oak
Small Trees and Shrubs	
Alectyon oleifolius	Rosewood
Pittosporum phylliraeoides	Butterbush
Hakea tephrosperma	Needlewood
Acacia homalophylla	Yarran
Acacia hakeoides	Western black wattle
Acacia deanei	Deanne's wattle
Senna artemisioides sp filifolia	Punty bush
Mallee Sandplains - Loamy Sands	
Scientific name	Common name
Trees	
Euclyptus dumosa	Congoo mallee
Euclayptus socialis	Pointed mallee
Geijera parviflora	Wilga
Brachychiton populenus	Kurrajong
Small Trees and Shrubs	
Pittosporum phylliraeoides	Butterbush
Hakea tephrosperma	Needlewood
Acacia havillandii	Havilland's wattle

Acacia rigens	Needle wattle
Acacia lineata	Streaked wattle
Senna artemisioides sp filifolia	Punty bush
Dodonea viscosa subsp angustissima	Narrow leaf hopbush

Planting Zones 8 and 9

Table B7: Species list for Planting Zones 8 and 9

Species suitability for Landscape positions for the lower region in the Murrumbidgee Catchment, Planting Zones 8 and 9.

Level to Depressed Plains - Clay	
Need a required tree: shrub ratio of 20:80	
Scientific name	Common name
Trees	
Acacia homalophylla	Yarran
Acacia oswaldii	Miljee
Acacia pendula	Boree
Allocasuarina luehmannii	Bulloak
Eucalyptus largiflorens	Black box
Shrubs	
Atriplex nummularia	Old man saltbush
Chenopodium nitrariaceum	Nitre goosefoot
Sand plains and low rises	
Scientific name	Common name
Trees	
Acacia homalophylla	Yarran
Acacia oswaldii	Miljee
Acacia pendula	Boree
Alectryon oleifolius ssp. canescens	Rosewood
Allocasuarina luehmannii	Bulloak
Callitris glaucophylla	White cypress pine
Casuarina cristata	Belah
Eremophila longifolia	Emubush
Eucalyptus largiflorens	Black box
Hakea tephrosperma	Hooked needlewood
Myoporum platycarpum	Sugarwood
Shrubs	
Acacia hakeoides	Western black wattle
Atriplex nummularia	Old man saltbush
Chenopodium nitrariaceum	Nitre goosefoot
Creek Lines and Riparian	

Scientific name	Common name
Trees	
Acacia oswaldii	Miljee
Acacia salicina	Cooba
Acacia stenophylla	River cooba
Casuarina cristata	Belah
Eucalyptus camaldulensis	River red gum (1)
Eucalyptus largiflorens	Black box
Pittosporum phylliraeoides	Butterbush
Shrubs	
Atriplex nummularia	Old man saltbush
Chenopodium nitrariaceum	Nitre goosefoot
Muehlenbeckia florulenta	Lignum (1)
Prior Streams, Lunettes and Sand Ridges	
Scientific name	Common name
Trees	
Acacia homalophylla	Yarran
Acacia oswaldii	Miljee
Acacia pendula	Boree
Acacia salicina	Cooba
Alectryon oleifolius ssp. canescens	Rosewood
Allocasuarina luehmannii	Bulloak
Callitris glaucophylla	White cypress pine
Geijera parviflora	Wilga
Hakea tephrosperma	Hooked needlewood
Myoporum platycarpum	Sugarwood
Pittosporum phylliraeoides	Butterbush
Shrubs	
Atriplex nummularia	Old man saltbush (1)
Chenopodium nitrariaceum	Nitre goosefoot

Brief activities schedule for revegetation in the Riverina

Table B8: Riverina calendar of activities for carbon/biodiversity projects

Month	Activity	Description
Summer	Order plants	<ul style="list-style-type: none"> Order plants early to guarantee supply. Crash graze sites to reduce biomass.
Autumn	Ground Preparation	<ul style="list-style-type: none"> Actions prior to ripping Ripping Cultivate soil after ripping if there are large clods and mound soil if site is damp/waterlogged. Record length of ripping to gain an accurate number of plants needed (no. of plants = ripping length/5). Livestock must be kept off sites that have been prepared for planting, or else soil compaction may occur.
	Fencing	<ul style="list-style-type: none"> Install stock proof fencing.
Winter	Planting Weed Control (shelterbelts)	<ul style="list-style-type: none"> One month prior to planting – by end of June at the latest. Apply knockdown and residual herbicide on 1 m wide strips along the rip line. This will control weed competition after planting. Only spray rip lines and not the entire site to reduce wind erosion and destruction of seedlings by cockatoos and hares.
	Pest Control	<ul style="list-style-type: none"> Control rabbits and hares to help avoid the added expense of replanting or the need for tree guards.
	Planting	<ul style="list-style-type: none"> Plant before late August and 1 month after residual weed control. Take care when transporting plants from the nursery to reduce wind damage.
After Planting	Ongoing Maintenance	<ul style="list-style-type: none"> Regularly inspect planting for signs of pest or stock damage.
	Grazing of sites	<ul style="list-style-type: none"> Livestock grazing should be excluded from each revegetation site for a minimum period of 3 years after planting has commenced.

Appendix C: Resources

Accounting for Nature

Website: <https://www.accountingfornature.org/>

Glossary of terms: <https://www.accountingfornature.org/key-documents>

Method catalogue (regulations can be found under each method)

<https://www.accountingfornature.org/method-catalogue>

Method regulations:

- **F-01 Accounting for Natural Mammal Condition Method :**
<https://www.accountingfornature.org/s/AFN-METHOD-F-01-V2-Accredited-26-August-2021.pdf>
- **F-02: A native woodland bird assessment methodology for diverse regenerating farmlands**
Available on request. A video about the method is available here:
https://www.youtube.com/watch?index=6&list=PLb_hirBxCu2H5KV6ku7RSRDQ26nXukP6J&v=n5Yjl9JYRCU
- **F-04 Koala Population and Habitat Condition Method:**
<https://www.accountingfornature.org/s/AFN-METHOD-F-04-V11Accredited-14-December-2021.pdf>
Video available: <https://youtu.be/CywQWx-3ahw>
- **NV-03: GreenCollar Native Vegetation Condition Monitoring Method:**
<https://www.accountingfornature.org/s/AfN-METHOD-NV-03v22-6tnj.pdf>
Video available: <https://youtu.be/qXs-bAft140>
- **NV-06: AfN and Landcare Native Vegetation:** <https://www.accountingfornature.org/s/AfN-METHOD-NV-06-v21-AfN-Landcare-Native-Veg-Method-Accredited-08-Feb-2021.pdf>
- **NV-07 Bush Heritage Australia – Native Veg Assessment :**
<https://www.accountingfornature.org/s/AfN-METHOD-NV-07-Accredited-26-June-2021-v31July-2022.pdf>
- **NV-13 NSW BCT Native Veg Monitoring :** <https://www.accountingfornature.org/s/AfN-METHOD-NV-13-v10Accredited-August-2023.pdf>

Mapping and biodiversity and vegetation maps

Atlas of Living Australia, <https://www.ala.org.au/>

NSW BioNet resources, <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet/resources>

NSW State Vegetation Type Map of Plant Community Types on the SEED Portal, <https://www.seed.nsw.gov.au/news-and-resources/news/nsw-state-vegetation-type-map-of-plant-community-types-now-available>

SEED portal, <https://www.seed.nsw.gov.au/>

SIX Maps (nsw.gov.au), <https://maps.six.nsw.gov.au/>

Google Earth, <https://www.google.com/earth/about/>

Regional resources and other guides

BCT's Restoring Native Vegetation guidelines, <https://www.bct.nsw.gov.au/sites/default/files/2019-08/Restoring%20Native%20Vegetation%20Guidelines.pdf>

Riverina Natural Resources Action Plan - Evidence Guide, https://www.lls.nsw.gov.au/_data/assets/pdf_file/0012/1457598/Riverina-NLP-Natural-Resource-Management-Evidence-Guide-2022-2027.pdf (section 5 includes a list of threatened species in different parts of the Riverina region)

Rural Living Handbook 2020, https://www.lls.nsw.gov.au/_data/assets/pdf_file/0007/1147804/Rural-Living-Handbook-2020.pdf

Wiradjuri plant use, https://www.lls.nsw.gov.au/_data/assets/pdf_file/0009/495261/wiradjuri-plant-use.pdf

Net Zero Plan

