Planning a Reforestation Project

This factsheet discusses the planning, implementation, and on-going management of a carbon sequestration project registered under the *Reforestation by environmental or mallee plantings FullCAM 2024* method.

Other carbon farming vegetation projects, agroforestry and commercial timber plantations require similar planning and management activities.

What are your objectives

For a farmer, an area of less productive land could be a carbon farming project with the potential to create carbon credits to offer a new income stream, used for insetting, or held as an asset.

Carbon farming projects can integrate with existing farming systems, maintain the integrity of rural communities and the agriculture industry. Plantings can help reduce salinity, erosion and waterlogging, enhance conservation and biodiversity values and provide shelter for stock.

When considering a reforestation project, the landowner should identify their long-term business plans including succession planning, land value and opportunity costs from committing to a single long-term land use. Determine and how it fits with current and future grazing and cropping practices.

Planning

Depending on the complexity and scale of the project, discuss on-going project management with a carbon service provider or a natural resource management or other land care group.

DPIRD's Service Provider Directory identifies professional advisors who assess feasibility, estimate the carbon sequestration potential, design and plan the project, and advise on the legal, tax and financial considerations.

A Reforestation Management Plan (RMP) is submitted with the application to register the project and is maintained over the life of the project. Many of the record-keeping and reporting requirements must now occur through the RMP:

- species planted or expected to be planted
- suitability of these species for the area
- how each species has or will be established

- planting type, geometry, spacing and expected stem density
- species to be used for infill planting and how it will be established
- how the project will be monitored.

Things to do:

- Develop a comprehensive budget that covers registration, site preparation, seedling/seed orders, machine or hand planting, fencing, and project management and reporting over the life of the project.
- Get advise from local and specialist nurseries and consultants on the right mix of local (endemic) species suitable for the soil and topography, and climate resilient (drying climate).
- Decide whether to use tube stock, direct seeding or a combination, and site preparation.
- Identify the area best suited to the plantings, the preferred configuration (e.g., belt, patch, block planting or a combination) and minimum stem density per hectare.
- Estimate the total planting area and row spacing to determine the number of seedlings, seed and any soil conditioning inputs.
- Identify how to protect the seedlings from stock and native animals including birds (i.e., fences, tree guards). Fencing should allow movement of native animals but not compromise seed or seedling survival.
- Consider habitats for fauna species (e.g., sand heaps, rock piles, logs, nesting boxes).
- Most Local Government Authorities require development approvals along with fire and pest management strategies. Ask about requirements and fees during the planning stage.

Timing

Once the application to register the project is submitted, activities like site preparation and planting can be begin and seedlings/seeds purchased.

Remain flexible: planting and site activities may be delayed or implemented over several years due to the impact of:

- adverse environmental conditions e.g., low rainfall and frost
- optimal planting time(s)
- seed availability and the requirements to fill nurseries orders (ask about order deadlines)
- availability of contractors and consultants
- the need to in-fill and replace losses to maintain planting density

Consult regularly with seedling and seed suppliers to secure orders.

Planting, weed and pest control

Implement pest and weed control at the right times to increase plant survival rates.

When direct seeding; residual and pre-emergent herbicides can adversely impact germination.

Determine machinery needs e.g. tree planter, specialised seeder or handplanting equipment. Suppliers may include farm tree nurseries, land care groups, and private contractors.

Consider preparation methods that will address site and soil constraints. This may include surface or ground water management, scalping, spraying, mounding, or ripping.

Prepare for weed and pest control programs (vertebrate and invertebrate). Red-legged earth mites, rabbits, kangaroos, birds and feral pigs can have significant, rapid impact on plantings. Fencing and tree guards are important considerations.

Weed and pest control can be discussed with local Natural Resource Management (NRM) and land care groups, DPIRD, ranger groups, private contractors, biosecurity groups and the Department of Biodiversity, Conservation and Attractions.

Allow time for permits for pest control (rabbit, fox, pig) noting kangaroos are protected.

Fire

Plan fire breaks, water points, and on-going weed control to reduce the risk. Local governments may also have bush fire management requirements.

Refer to the CER's Reducing the risk of fire and preserving sequestered carbon in ACCU Scheme projects.

Auditing – alternative assurance process for low-risk projects

The new Carbon Credits (Carbon Farming Initiative) (Audit Thresholds) Instrument 2025 includes alternative assurance arrangements for low-risk project. If the project qualifies as a low-risk environmental plantings project, it may be eligible for zero (0) scheduled audits rather than 3 scheduled audits.

To qualify:

- projects must be less than 200 ha (total size of all carbon estimation areas)
- proponents must be the owner, leaseholder or native title holder of the land
- the project must be modelled as a mixed species block planting in FullCAM.

The project will be subject to geospatial monitoring by the Clean Energy Regulator (CER).

Resources

- Wheatbelt Restoration Standards – WA Biodiversity Science Institute
- Revegetation Industry Association of WA
- Environmental Consultants Association (WA)
- WA Landcare Network
- Dandjoo - a biodiversity data repository managed by DBCA
- Native Vegetation Handbook Series – information based on local government areas
- Florabase - database of WA flora species including descriptions, maps, images, and conservation status. Results can be filtered by search criteria such as by local government area. Helpful with identifying local species for revegetation planning.
- MyPestGuide, Herbiguide and DPIRD - weeds, pests and disease information

Key features of the Reforestation by environmental or mallee plantings FullCAM method 2024

Crediting	25 years – the crediting period is the amount of time the proponent can claim a project's Australian carbon credit units (ACCUs)
Permanence	A period of 25 or 100 years after the first ACCUs are issued when the carbon stocks (trees) must be maintained.
Eligibility	There are general eligibility requirements in the Act, which include: • newness • legal right • regulatory additionality and funding from other government programs Projects can be run in any area of Australia with FullCAM modelling data, and plantings must be established on land that has been clear of forest cover for at least 5 years previously.
Project activities	A project involves establishing and maintaining vegetation such as trees or shrubs on land that has been clear of forest for at least the last 5 years. This can be either a mallee eucalypt planting or a mix of endemic native species. Trees can be planted as either seeds or tube stock, in rows or randomly, and in areas that are either linear belts or blocks. They must be planted at a density that will allow them to achieve forest cover, which means they must have the potential to reach a height of at least 2 metres and provide crown cover over at least 20% of the land. Site preparation and planting can now begin as soon as a project application is submitted. Up to 20% each calendar year of native seed can be collected from the planting site.
Exclusions	The land used for the project must not contain woody biomass (have been cleared). Under the new method, many environmental weeds can now be cleared then replanted with native forest. Mallee eucalypt plantings are excluded from areas that receive more than 600 millimeters of long-term average rainfall unless the planting meets the exemption requirements.
Specialist skills	To ensure the required level of accuracy of the inputs to FullCAM for calculating carbon stock, it may be necessary to seek assistance from a technical expert. You should consider the cost of this service before deciding to run a project.
How is abatement calculated	Abatement is calculated using a modelling tool called the Full Carbon Accounting Model (FullCAM). FullCAM uses a variety of settings (calibrations) to model the amount of carbon stored in different types of plantings. The data for FullCAM includes the location, planting dates, species, planting geometry (i.e., belts, blocks), plant spacing (distance between rows, distance between adjacent plantings), stocking density and tree proportion, where relevant.

Reporting and auditing requirements	The method sets out method-specific requirements for the first and subsequent reports. The information you are required to provide includes: • net abatement amount and related carbon stock data • data on emissions from biomass burning and fuel use, • project area, forest management and forest cover information • FullCAM files and output data. An **application form** and supporting documentation for an alternative assurance arrangement can be sent to **PlantingsPlantations@cer.gov.au** during or after registration. All projects receive an audit schedule when the project is declared and must provide audit reports according to this schedule. In most cases, a minimum of 3 audits will be scheduled. An initial audit report must be submitted with the first report.
Monitoring requirements	The method describes specific monitoring requirements, including using on-ground observation and/or remote-sensing imagery: • monitor management and disturbance events, • demonstrate the requirements for any specific calibrations have been met.
Record-keeping requirements	The method describes record-keeping requirements related to: • forest cover and plantings • stratification into carbon estimation areas and the project area. • fuel use (diesel) • FullCAM modelling and specific calibrations used. A Reforestation Management Plan includes the details required and needs to be signed off by an independent expert.