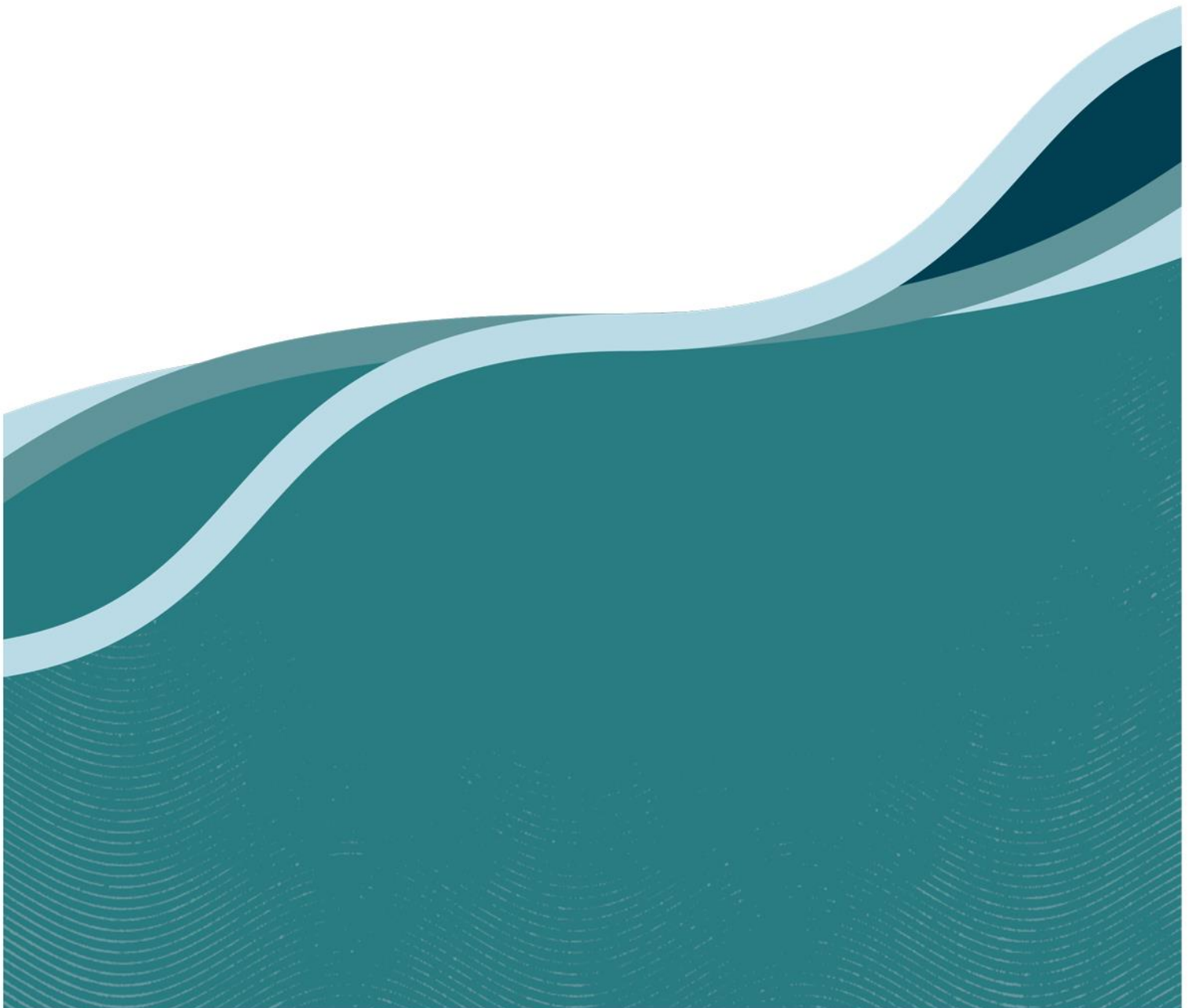




Department of  
Primary Industries and  
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# Reforestation by environmental or mallee plantings method - Carbon Farming Plan



## Overview

The Western Australian Government has developed this guideline to assist farmers in the South-West Land Division to develop a Carbon Farming Plan (CFP) for carbon farming projects.

A well-prepared Carbon Farming Plan will support the landholder to understand both how to maintain and integrate carbon sequestration on their land and their broader business objectives. The CFP should consider interaction between changing management practices, soil types, climate and other environmental factors, and broader farm system outcomes.

This guideline may be used by landowners with or without the assistance of a professional Service Providers. A more detailed Guidance document outlining further detail on key areas of a carbon farming plan including links to additional information can be found [here](#).

Any external providers engaged should work collaboratively with the landowner to ensure the obligations, risks, and potential rewards of undertaking a carbon farming project are understood. As the CFP will inform important, long term investment decisions it needs to be tailored to individual business needs and circumstances.

## Purpose

This *Carbon Farming Plan – Guideline for carbon farming projects using the Reforestation by environmental or mallee plantings method* can assist with the development of a comprehensive Carbon Farming Plan detailing the proposed activities for vegetation-based carbon farming projects.

A carbon farming plan can help farmers determine how carbon farming might fit into existing business operations, the costs and returns you could expect, and what the management, obligations and risks are in developing a carbon farming project.

The process of developing the CFP helps landholders to understand the key details of integrating and maintaining carbon sequestration into their enterprise.

The CFP should include key issues that a landholder should consider over the life of the project, and reflect the nominated permanence period (i.e., 25 or 100 years). Landholders need to ensure they have sufficient information to make informed decisions regarding their permanence obligations, and to ensure that the project fits their long-term land management and business plans.

*Note: this document has used reforestation to align with the Clean Energy Regulator's (CER) methodology naming conventions.*

A CFP may also be useful for farmers wishing to apply for the WA Carbon Farming and Land Restoration Program (CF-LRP) - depending on the level of funding requested, a CFP may be encouraged, or required.

CF-LRP submissions are evaluated by the Department of Primary Industries and Regional Development (DPIRD) to determine the project's potential as an investment under the ACCU Plus funding stream. More information on the CF-LRP can be found [here](#).

## Resources

DPIRD recommends that the author of the CFP refers to the following resources for further compliance and eligibility considerations:

### Clean Energy Regulator (CER)

- [Carbon Credits \(Carbon Farming Initiative\) \(Reforestation by Environmental or Mallee Plantings—FullCAM\) Methodology Determination 2014](#)
- [A guide to the reforestation by environmental or mallee plantings - FullCAM method](#)

## Choosing a professional Service Provider for your carbon farming project

Landholders are not required to engage a carbon service provider to plan their carbon farming project, however in alignment with the CER, DPIRD advises landholders new to the carbon market and ACCU scheme (formerly the Emissions Reduction Fund, ERF) to seek professional advice regarding the technical and regulatory aspects of a carbon farming project, in conjunction with financial, legal and tax advice.

There are various arrangements that can be negotiated with service providers including:

1. Do it yourself and hire service providers to assist, on a fee-for-service basis
2. Project service provider (or agent) managing many or most project activities
3. Project aggregator or developer who undertakes and manages the project on behalf of landholders.

These are discussed in more detail in [\*\*Key Steps – Establishing a Carbon Farming Project\*\*](#).

## Instructions for using the guidelines

This document provides a guideline with headings and suggested minimum content to develop a suitable CFP. This enables the farmer to achieve registration of the project and apply to the CF-LRP.

Additional information unique to the project can also be included along with other related information which will assist decision making.

This guideline can be modified to suit other ACCU Scheme vegetation-based methods. A separate guideline has been developed by DPIRD for soil-based carbon farming projects.

# Guideline: Carbon Farming Plan – reforestation carbon farming project

## Proponent and service provider details

**Proponent:** *Name of the landowner/s.*

**Farm/Project:** *Name of the farm property, business enterprise or project.*

**Permanence Period:** *25 years or 100 years*

**Strategy Development Team:** *Name, Role, Business Address, Phone, Email of each Professional Service Provider\* who contributed to the development of this CFP.*

*\*Note any familial or business relationship with the landowner as per the CER requirements for independence of advice.*

## Executive summary

*The executive summary is written at the completion of the CFP and provides an overview of the farm business and the project to be undertaken.*

*The summary should describe the project location and the high-level objectives that you wish to achieve in running a reforestation project (Minimum 250 words), such as:*

- *Goals for the project (environmental, business)*
- *Overview of the farm (location, current farming activities e.g., broad acre cropping of wheat, cattle, mixed grain and sheep)*
- *Involvement of the proponent in the farm's past and future planning,*
- *Description of the last 5 years land management activities and proposed changes,*

## Property details

*Describe the property where the carbon farming project is planned. Details should include:*

- *Property address, rainfall zone ([Appendix A – Rainfall Zones](#)).*
- *State the total property area and the project area (in hectares) within the property boundary that is covered by this CFP.*
- *Insert a property map showing property and project boundaries, co-ordinate, and legend. If you do not have access to an existing property map, you can generate one using DPIRD's Natural Resource Info (WA) [digital mapping tool](#).*

## Spatial analysis

### Carbon Estimation Areas (CEAs)

**Carbon Estimation Area:** *Identify the project's CEAs and locations. More information on CEAs can be found [here](#).*

*Identifying CEAs according to their inherent capability (better soil, better tree growth and survival rates) will help you determine the most appropriate areas for your reforestation project and may increase profitability.*

- Include a property map and a description of soil types and vegetation system/s identified in the project area (use a legend or key).
- Existing maps can be included, or you can access maps using DPIRD's Natural Resource Info (WA) [digital mapping tool](#).

## Vegetation assessment and soil types

**Soil identification:** Identify and describe the different soil types in each CEA.

- Mark the different soil types using the digital mapping tool listed above.

Information on soil types helps identify the CEAs on your property. Managing CEAs according to their capacity to sequester carbon may increase productivity and profitability and minimise the risk of losing soil carbon stocks.

**Species list:** Nominate the proposed species to be planted in each of the project's CEAs.

The selection of plant species should reflect the objectives of the revegetation plans and other management considerations.

Online resources are available to assist you identify locally occurring (endemic) plant species and other ecological assets. Resources available include:

- DPIRD's free [Carbon Farming and Land Restoration Program Co-benefits Information Portal](#) has information on both vegetation and soil types. Refer to the [portal user guide](#) for tips on how to create and print your map.
- [Dandjoo](#) is a whole-of-state biodiversity data platform database of the flora of Western Australia providing scientific information including descriptions, maps, images and conservation status can provide results based on multiple search criteria including by local government area. This may help with identifying local species for revegetation planning.
- The [Native Vegetation Handbook Series](#) are based on local government areas and identify many environmental values including landscape, soil and vegetation units/systems and document locally occurring plant species listed by vegetation unit.
- [Habitat for Nature Conservation](#) includes a number of links to revegetation documents and case studies.
- Your local Natural Resource Management (NRM) organisation also holds this information for your geographic region. To find your local NRM use this [map](#).

**Other desktop analysis:** Include any relevant spatial analysis showing relevant data such as:

- rainfall,
- topography,
- locations of nearby remnant vegetation,
- analysis of vegetation types,
- threatened species, and
- co-benefit analyses.

## Sequestration estimates (forward abatement estimate)

**Sequestration potential:**

Indicate the potential carbon sequestration of your project:

- *Include plans, maps, reports (e.g., LOOC-C, FullCAM report) or self-assessments that indicate the carbon sequestration potential of your project over a 25-year project period.*

*Online tools are available to help estimate the project's carbon sequestration potential:*

- *FullCAM (the Full Carbon Accounting Model) - a calculation tool that can generate abatement estimates for ACCU scheme vegetation methods. Download FullCAM for free at <https://www.dcceew.gov.au/climate-change/publications/full-carbon-accounting-model-fullcam>*

## Baseline period land management activities

**Land management activities over the previous:** *Outline what the land has been used for in the previous 5 years.*

- *Nominate the land management activities and usage for each CEA.*

*The baseline period accounts for the years prior to registration of the project and will affect estimation of the sequestration potential.*

## Project activities

**Proposed project activities:** *Provide detailed technical and operational information on the planned reforestation activities including:*

- *Area (hectares) to be revegetated*
- *Site preparation method*
- *Species to be planted, and proportion of seed to tubestock*
- *Revegetation establishment method (e.g., tubestock, direct seeding, handplanting, combination).*
- *Intended machinery use (e.g., tree planter with/without seeding capability, niche or specialised seeder, handplanting equipment, other).*
- *Proposed weed and pesticide control program*
- *Fencing (type and kilometres)*
- *Estimate carbon emissions from implementing and managing project activities.*

*A Reforestation by environmental or mallee plantings project involves establishing and maintaining vegetation such as trees, shrubs and other local plant species on land that has been clear of forest for at least 5 years. You can plant either a mix of trees, shrubs and understory species native to the local area or species of mallee Eucalypts.*

*Consider the most appropriate planting configuration (belt or block plantings) to fit with existing practises (e.g., grazing/cropping rotations) to achieve the project outcomes.*

*For the project to be eligible to receive ACCUs<sup>1</sup>, new, and materially different land management activities, as described in the CFP, need to be undertaken.*

*These cannot be started until the project is officially registered by the CER.*

**Timing of project activities:** *Identify when each of the listed activities are planned.*

*Include expected commencement and completion dates e.g., how many years the reforestation program will be implemented over.*

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<sup>1</sup> Australian Carbon Credit Units (ACCU)

## Cost benefit analysis:

Service providers should base any feasibility advice given to a farmer about a carbon farming project on:

- the requirements of the selected method(s),
- individual farmer/client's circumstances that should include:
  - cost estimates involved in the establishment of the project and ongoing maintenance and management costs.
  - initial account and reporting costs.
  - ongoing report and audit schedule and estimates of these associated costs.
  - report of the project carbon sequestration at each reporting period.
  - forecast of ACCU prices and the impact of future revenue.

## Excluded and restricted activities and approvals

**Excluded and restricted activity statement:** *Include a statement confirming that activities restricted in **Division 3.8** of the reforestation by environmental or mallee plantings method will not be conducted.*

*See Appendix B – Restricted Activities for activities not to be conducted or to be restricted.*

*Example: I, the project proponent, confirm I am aware of the obligations to act consistently with the requirements of Division 3.8, and that the activities restricted by Division 3.8 are not being conducted or proposed to be conducted.*

**Approvals and permits:** *List any approvals or permits required for the project and/or project activities, and their status.*

- *Include local or State government approval or permits. This may include, but not limited to local planning approvals and notice to drain or pump water.*
- *State if approval has already been granted or in the process of being approved.*
- *If approvals will be applied for at a later stage of planning, indicate when this will occur where possible.*

## Monitoring and evaluation consideration

*Monitoring and evaluation:*

*A carbon farming plan should include a detailed monitoring and evaluation section.*

*In line with the relevant methods, the following is an overview of the monitoring requirements for:*

- *Reforestation by Environmental or Mallee Plantings - FullCAM method see 5.3 & 5.4*

**Co-benefits:** *List the co-benefits relevant to your carbon farming project.*

*For the purposes of this document, “co-benefits” are defined as the environmental, social, or economic benefits arising from a carbon farming project in addition to carbon abatement.*

*Some additional resources on co-benefits can be found here:*

- *Accounting for Nature framework*
- *Co-benefits standard*
- *Identify the co-benefits, categories and criteria to be delivered by your project.*

- Describe the steps needed to monitor and measure how the activity(s) are achieving reforestation objectives and environmental and productivity co-benefits, and the metrics to be used including:
  - Contracting an independent ecologist, local land care/NRM group or relevant professional to assess the site to demonstrate the project's environmental values.
  - On-ground monitoring techniques (e.g., plant counts (e.g., survival rates of seedlings and direct seeding) photographic and/or satellite imagery) to demonstrate survival, evidence of implementation and ongoing reforestation health.
  - Contracting a service provider experienced in **FuIICAM** to calculate the carbon stock held in the project's trees, shrubs, and debris.

*Example: Environmental co-benefit metrics will include documentation from an independent ecological assessment and surveys that confirms significant species (i.e., rare, threatened) have increased in density, diversity, and occurrence.*

## **Risk assessment and permanence considerations**

**Risk Assessment:** *Detail your risk management plan.*

*Risks can be listed in a table - See [Appendix C - Risk Matrix](#) for a matrix and guidance table you can use to assess risk, consequence, likelihood and an evaluation of risk acceptance.*

*Identify and include:*

- *potential risks to the delivery of your project, including any potential negative environmental, community, or economic impacts that may be caused by your project (e.g., adverse impacts on neighbouring properties).*
- *the probability and effect of those risks eventuating,*
- *mitigation actions that you will implement, and*
- *permanence considerations.*

*Risks that remain high after mitigation/control actions have been implemented should be considered as significant limiting factors to successful delivery of the proposed activities.*

*Landholders will need to assess the risk profile of their project and make decisions on what they are prepared to accept and manage over the life of their project given their resources.*

**Permanence considerations:** *State the provisions considered to ensure carbon permanence over the selected period (25 or 100 years).*

*Consider provisions for project activity timing and operational flexibility including:*

- *allowing for adverse environmental conditions,*
- *supply issues such as accessing seed or nursery space,*
- *securing environmental professionals,*
- *needing to in-fill plant losses.*

*Include information on the risk mitigation activities planned to protect and maintain the carbon stocks credited to the project. Risks may include:*



- *fire, drought or flood,*
- *poor establishment of vegetation,*
- *weed and pest control, and*
- *restrictions on grazing.*

## **Qualified person statement**

*Provide information outlining the qualifications of the person who prepared and/or reviewed the CFP:*

**Business Name:**

**ABN/ACN:**

**Address:**

**Phone:**

**Email:**

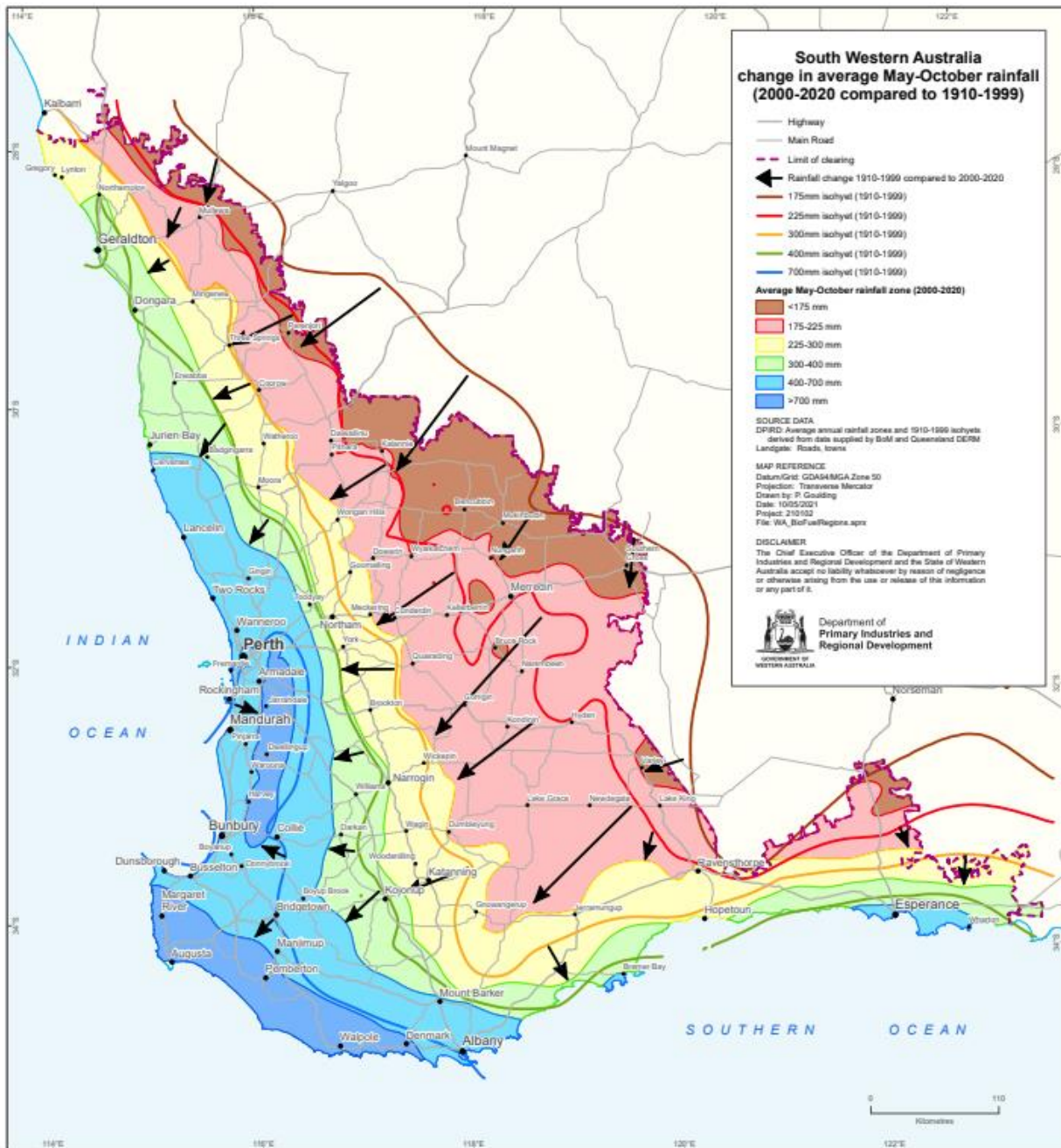
**Qualifications:**

**Experience:**

**Professional Memberships:**

**Acknowledgement of having no financial interest in the project:**

# Appendix A – Rainfall Zones



# Appendix B – Restricted Activities

## Division 3.8 Restricted activities

### 3.45 Harvesting

- (1) Subject to section 3.24, biomass must not be removed from a carbon estimation area except in accordance with this Division.
- (2) Up to 10% of fallen timber may be removed from a carbon estimation area in a calendar year for personal use.
- (3) In this section:  
**personal use**, of fallen timber, means use that does not involve the sale, or other commercial use, of the timber.

### 3.46 Other permitted removals

Biomass may be harvested:

- (a) subject to section 3.48, for thinning for ecological purposes; or
- (b) to remove debris for fire management; or
- (c) to remove fruits, nuts, seeds, or material used for fencing or as craft materials, if those things are not removed for sale; or
- (d) in accordance with traditional indigenous practices or native title rights.

### 3.47 Grazing

If grazing occurs in a carbon estimation area:

- (a) the grazing must not affect the achievement or maintenance of forest cover in the area; and
- (b) the Regulator may request evidence that demonstrates that the grazing has not prevented:
  - (i) for a generic calibration—the achievement or maintenance of forest cover; or
  - (ii) for a specific calibration:
    - (A) compliance with the requirements for stocking density and/or tree proportion for the calibration; and
    - (B) the achievement or maintenance of forest cover.

**Note:** Evidence may include date-stamped, geo-referenced, remotely sensed imagery.

### 3.48 Thinning

If thinning occurs in a carbon estimation area:

- (a) a specific calibration cannot be used; and
- (b) the generic calibration must be used;

for the purpose of Division 4.3.

**Note:** Section 4.8 specifies the primary requirements to be met for the use of a specific calibration.

### 3.49 Use of lime or fertiliser

If the use of lime or fertiliser occurs in a carbon estimation area:

- (a) a specific calibration cannot be used; and
- (b) the generic calibration must be used;

for the purpose of Division 4.3.

**Note:** Section 4.8 specifies the primary requirements to be met for the use of a specific calibration.

## Appendix C – Risk Matrix

Consequence	Likelihood				
	A Rare	B Unlikely	C Possible	D Likely	E Almost Certain
1 Insignificant	L	L	L	M	M
2 Minor	L	L	M	H	H
3 Moderate	L	M	H	H	H
4 Major	M	H	H	E	E
5 Catastrophic	H	H	E	E	E

Consequence Rating		
Rank	Descriptor	Environmental
1	Insignificant	No impact of delivery of predicted gains
2	Minor	Short term or low-level long-term impact on predicted gains
3	Moderate	Long term impact significantly limiting predicted gains
4	Major	Extensive, long term impact on predicted gains with uncertain outcomes
5	Catastrophic	Impacts are irreversible and/or permanent

Likelihood Rating			
Rank	Descriptor	Frequency	Description
A	Rare	Will occur once every 30 years Once in 30 years or less frequent.	The event may occur in exceptional circumstances. Not likely to occur, but it's not impossible.
B	Unlikely	Will occur once in 10 years. Could occur once in 10 years or multiple times over 20 years.	The event could occur at some time, usually requires a combination of circumstances to occur.
C	Possible	Will occur once every 5 years. Once in 5 years or multiple times over 10 years.	The event should occur at some time. Is sporadic, but not uncommon.
D	Likely	Once per year. Once in a year or so.	Known to re-occur approximately annually.
E	Almost Certain	Will occur more than once a year. Multiple times in a year.	The event is expected or known to occur often.

Acceptance Evaluation		
This decision should be considerate of compliance requirements and As Low As Reasonably Practicable (ALARP)		
Rank	Acceptance evaluation	Description
Extreme	Unacceptable Risk to outcome	Revegetation shall not proceed without further controls to reduce risk.
High	Undesirable risk to outcome	Work shall only proceed when the landholder is comfortable with risk management. Mitigation measures should be recorded.
Moderate	Monitor activity and ongoing risk	Work may proceed with ongoing monitoring of control measures.
Low	Acceptable Proceed	Work may proceed, working in accordance with planned controls.

#### Important Disclaimer

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