

# Vegetation Management Proposal

TIA Dairy Research Facility On-Farm Natural  
Capital Accounting Demonstration

*Revision 2, June 2026*



## Introduction

This document is intended to provide an update on the status and proposed next steps of the On-farm Natural Capital Accounting Demonstration at the Tasmanian Institute of Agriculture Dairy Research Facility (TDRF) at Elliott.

This demonstration is being delivered by Cradle Coast NRM in partnership with the Tasmanian Institute of Agriculture (TIA) and supported by Fonterra and Dairy Tasmania.



*Data collection for the Natural Capital Account*

## Project progress

Completed

- Project commenced February 2025
- MOU established (Cradle Coast NRM with TIA, Fonterra and Dairy Tasmania)
- Vegetation and soil data collected to establish a baseline Natural Capital Account through Accounting for Nature (AFN) framework
- AFN Technical report submitted and reviewed
- Identifying and planning on-farm natural capital improvement actions
- Delivery of communication resources and extension activities to share demonstration progress
- AFN technical report re-submission
- Drone mapping of vegetation
- Initial weed control of 2026 planting areas

Next Steps

- Annual weed control of existing vegetation and proposed revegetation areas
- Fencing off areas of remnant vegetation, including protecting paddock trees
- Planting of at least two new revegetation areas to increase area of native vegetation and improve Giant Freshwater Crayfish habitat
- Establish new shelterbelts and agroforestry areas across the property
- Deliver communication resources and extension events for farmers and industry in collaboration with demonstration partners and supporters
- Re-assess the vegetation condition through with AFN framework autumn 2028 to determine if vegetation condition has improved
- Project ends June 2028
- Opportunity for ongoing vegetation condition improvement across property and maintenance of AFN account beyond project end

## What is natural capital and a natural capital account?

'Natural Capital' or 'Natural Assets' are a re-branding of our natural resources –such as soil, water and living things –so they can be better recognised and valued in an economic sense.

There are emerging standards and frameworks for businesses and landowners to use to measure, assess and report on nature in a consistent and verifiable way, so they can manage their natural capital

assets to make informed decisions on environmental risks and opportunities.

This on-farm demonstration is developing accounts through the certified Accounting for Nature methodologies, aligning with disclosures under the Taskforce on Nature-related Financial Disclosures and consistent with the United Nation's Standard for Environmental Economic Accounting.

## Why are people interested in natural capital?

Unfortunately, our natural systems are in decline driven by immense pressure from human activities. Damaged ecosystems exacerbate climate change, undermine food security and put people and communities at risk. \$44 trillion of economic value generation – over half the world's total GDP – is moderately or highly dependent on nature and its services and, as a result, exposed to risks from nature loss (World Economic Forum 2020).

To make good decisions that involve nature, we need to understand how nature supports our economy and wellbeing - which is where natural capital accounting fits in. The world is uniting in developing consistent systems of measuring and accounting for nature in an effort to value, preserve and enhance nature and better integrate into existing economic systems.

Natural capital risks and opportunities include:

- Mandatory sustainability reporting containing climate-related financial disclosures for large businesses

- Voluntary carbon and biodiversity reporting and nature-related risk disclosure by businesses to support access to markets
- Tasmanian farmers can already participate in, or prepare for, natural capital markets. This includes the Australian Carbon Credit Unit market and the new Nature Repair Market
- A verified natural capital account can provide transparency for businesses making sustainability claims, reducing reputational harm from false or inflated claims (greenwashing)



One of five dams across the TDRF

## Demonstration Overview

The On-Farm Natural Capital Accounting Demonstration and associated extension activities aim to demonstrate the process of undertaking a natural capital account on a working dairy farm and explore the drivers which are increasing interest in and scrutiny around the management of on-farm natural capital.

**What:** An on-farm natural capital account developed utilising a rigorous scientific framework to measure and track changes in natural capital condition over time. This includes:

- a baseline assessment of soil and vegetation condition
- implementation of practical actions to improve natural capital
- on-going monitoring and re-evaluation to track outcomes
- Registration and certification through Accounting for Nature (AFN) framework

**Where:** TIA Dairy Research Facility, Elliott, Tasmania

**Who:** This demonstration is led by Cradle Coast NRM in partnership with the Tasmanian Institute of Agriculture (TIA) and supported by Fonterra and Dairy Tasmania.

**When:** Initial natural capital data was gathered in February 2025. On-farm natural capital improvement actions will be undertaken from early 2026 through to early 2028, when the condition of the farm natural capital will be again reassessed through the AFN framework. Communication and extension activities are being delivered throughout with the demonstration to be completed by June 2028.



*Vegetation surrounds many dams on the property*

## Key objectives of the demonstration:

- Demystify Natural Capital Accounting and demonstrate how it can be used by farmers and industry in north-west Tasmania
- Demonstrate and implement targeted management practice to improve environmental health and align with Australian Dairy Sustainability Framework and supplier sustainability aspirations (Fonterra)
- Monitor changes over time to track improvements and resilience benefits for farms.
- Provide a practical model for farmers to integrate improved natural capital management into their operations
- Identify market opportunities, such as biodiversity and carbon credits, to create new revenue streams for farmers
- Bring north-west farmers along, so farmers can decide how accounting for and better managing on-farm natural capital could support their farm

## Alignment of proposed work with industry & stakeholder outcomes

The following table breaks down the proposed on-farm vegetation management actions undertaken as part of this demonstration into six categories (listed vertically, left), ranking each against six of stakeholder and industry outcomes (listed horizontally, top).

	<i>Increased co-benefits of natural capital on farms</i>	<i>Increase or maintain carbon capture &amp; storage</i>	<i>Improved vegetation condition / Econd Score</i>	<i>Align with Australian Dairy Sustainability Framework</i>	<i>Align with TIA Strategic Plan 2026 to 2031</i>
Remnant vegetation	✓	✓	✓	✓	✓
Biodiverse plantings	✓	✓	✓	✓	✓
Shelterbelts	✓	✓	✓	✓	✓
Paddock Trees	✓	✓	✓	✓	✓
Agroforestry	✓	✓		✓	✓
Weed Control	✓	✓	✓	✓	✓

## Communication and extension

Over the life of this demonstration we aim to dive into the practicality of how each of these on-farm management actions can support north-west Tasmanian farmers to align with supplier expectations, improve farm resilience and or profitability, or offer new market opportunity or diverse income streams. We will aim to work closely with our demonstration partners and supporters, and others in developing useful and engaging communications resources and deliver extension activities to share the demonstration outcomes.



*Cradle Coast NRM Land Program Manager Hannah Sadler discusses the proposed works with TDRF Farm Manager Andrew Marshall.*

## Proposed next steps

Now that the baseline natural capital accounts have been established, the demonstration proposes to undertake on-ground activities to improve the status of the farm's vegetation assets.

The proposed on-ground natural capital improvement activities have been negotiated with TIA farm staff to ensure that each activity is practical and realistic for farmers to undertake on north-west Tasmanian farms by farmers or local contractors.

The proposed activities also aim to:

- Increase the co-benefits of natural capital on farms through farm resilience and or productivity benefits, including investigating pathways to potential diverse income streams through agroforestry, carbon and biodiversity credits.

- Increase or maintain carbon capture and storage to reduce farm total emissions intensity
- Improve the condition and extent of native vegetation across the TDRF, aiming for an increase on our registered AFN vegetation baseline Econd score when the vegetation condition is reassessed in early 2028.
- Align with Australian Dairy Sustainability Framework and Fonterra Farm Environment Plans for carbon, animal welfare, water quality and biodiversity outcomes
- Align with the TIA Strategic Plan 2026-2031
- Support the delivery of the Australian Government's Climate-Smart Agriculture Program outcomes

## Planned priority actions to improve on-farm natural capital

The following actions are proposed to be implemented as a priority over the next 3 years to improve natural capital values across the TIA Dairy Research Facility:

- Weed control and fencing to maintain or improve condition of current quality intact native vegetation across the property, including mature wet Eucalypt forests and woodlands and mature revegetation areas.
- Weed control and revegetation of new areas around two dams and smaller tributaries to improve water quality and habitat, especially for the iconic endemic threatened Giant Freshwater Crayfish (*Astacopsis gouldi*).
- Establish new shelterbelts utilising plantation species on exposed western edges of the TDRF to shelter stock and improve pasture growth of adjacent paddocks.
- Improve protection and maintenance of large paddock trees which provide quality native habitat and stock shade and shelter.
- We are also investigating opportunities to establish various agroforestry opportunities across the TDRF.

## Investment towards on-ground works and industry outcomes

This demonstration has been established as part of the Our Natural Advantage project funded by the Australian Government through to June 2028.

Not all the potential on-ground activities identified as part of this demonstration have a commitment of action within the demonstration timeline (February 2025-June 2028) due to capacity and funding.

This complete list of proposed on-farm vegetation management areas includes all the areas which have been considered as practical on-farm actions that can be implemented across TIA Dairy Research Facility that would meet the demonstrations objectives.

As at June 2026, the vegetation management areas where on-ground action is currently underway or planned to be implemented within the period of the demonstration (through to June 2028) have been identified in the table above.

Cradle Coast NRM and TIA are seeking to maximise on the opportunities and outcomes of this demonstration and welcome collaboration and, as appropriate, financial investment in on-ground activities or extension opportunities going forward beyond the timeline of this demonstration.



*Image: Tributary vegetation at the TIA Dairy Research Facility*

Please note, all of the areas of existing remnant native vegetation, native paddock trees and proposed new biodiverse planting areas have been included in the baseline vegetation account established under the Accounting for Nature framework.

Proposed areas of shelterbelts and agroforestry are not included in the vegetation account as they are currently pasture and the proposed actions aim to demonstrate other farm co-benefits rather than a certified up-tick in native vegetation condition.

## Proposed on-ground work areas



### Key:

 Property Boundary

### Activity types:

 Remnant Vegetation

 Biodiverse Plantings

 Shelterbelts

 Paddock Trees

 Agroforestry

 Weed Control

*The TDRF is a 232-hectare dairy and livestock research facility at Elliott, north-west Tasmania. The facility operates a 50-bay rotary dairy and currently supplies milk to Lactalis - Mainland Dairy.*

To learn more about the research facility, visit <https://www.utas.edu.au/tia/research/smart-farms>

## List of proposed on-farm vegetation management areas

Works to be  
actioned by  
June 2028?

### Area name

	Area name	Works to be actioned by June 2028?
Remnant vegetation	<b>1</b> Eucalyptus Viminalis Patch	✓
	<b>2</b> Northern Eucalypt Patch	✓
	<b>3</b> Gully Vegetation North of Dairy	✓
	<b>4</b> Remnant and Revegetation Adjacent Lower Dam	✓
	<b>5</b> South West Mature Eucalypts on Tributary Near Pivot	✓
	<b>6</b> Mature Revegetation on Southern Boundary	✓
Biodiverse plantings	<b>7</b> Lower GFC Planting Area	✓
	<b>8</b> Upper GFC Planting Area	✓
	<b>9</b> New Dam Enhancement	✓
	<b>10</b> Weedy Tributary	✓
Shelterbelts	<b>11</b> Western Boundary Shelterbelt	✓
	<b>12</b> Boundary to Eucalyptus Viminalis Patch Shelterbelt	✓
	<b>13</b> Old Dairy Shelterbelt	
	<b>14</b> Farmhouse Shelterbelt North	
	<b>15</b> Farmhouse Shelterbelt South	
Paddock Trees	<b>16</b> Paddock Trees by Effluent Pond	✓
	<b>17</b> Paddock Trees Adjacent Eucalyptus Viminalis Patch	✓
	<b>18</b> Paddock Trees Adjacent Gully Vegetation	✓
Agroforestry	<b>19</b> Agroforestry Near Effluent Dam	
	<b>20</b> Paddock South of Pivot	
	<b>21</b> Pivot Wedge	
	<b>22</b> Pivot Corner on Nunns Road	
	<b>23</b> Pivot Corner on Murchison Highway	
	<b>24</b> Steep North-East Plantation	
	<b>25</b> South West Corner	
Weed Control	<b>26</b> Main Tributary	✓
	<b>27</b> Northern Boundary GFC Tributary	✓



**Australian Government**



**Our  
Natural  
Advantage**



CRADLE COAST AUTHORITY

This project is supported by the Australian Government through funding from the Natural Heritage Trust under the Climate-Smart Agriculture Program and delivered by Cradle Coast NRM, a member of the Commonwealth Regional Delivery Partners panel in partnership with Tasmanian Institute of Agriculture with support from Dairy Australia and Lactalis - Mainland Dairy.



# Appendix A

## Proposed on-farm vegetation management areas

On-farm natural capital accounting demonstration  
at the TIA Dairy Research Facility

*June 2026*



# Remnant Vegetation

## Proposed Activity Area 1

### Eucalyptus Viminalis Patch

This beautiful remnant *Eucalyptus viminalis* wet forest is a threatened native vegetation community. The area has been and is used as a gravel pit, a silage pit and a dead pit but the remaining vegetation is in very good condition, with minimal weeds.

It would be beneficial to take steps to reduce any further encroachment into this area by removing any non-essential items dumped within the vegetation and consider options to, in the long-term, rehabilitate the silage pit, put the dead-pit somewhere else and rehabilitate areas of the gravel pit. Improving the vegetation condition of this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Undertake targeted weed control of garden escapees near the dead pit
- Explore long-term relocation and rehabilitation options to reduce further degradation

**Size:** 5.785 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** Absorbed into TIA Farm operating expenditure. Weed control to be funded through Cradle Coast NRM's Our Natural Advantage project.

*This area has been included in the baseline vegetation account with AFN.*



3D photogrammetry (drone captured) of proposed activity area 1

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage ✓

Increased co-benefits of natural capital on farms ✓

Align with Australian Dairy Sustainability Framework ✓

Improved vegetation condition / Econd Score ✓

Align with TIA Strategic Plan 2026 to 2031 ✓

# Remnant Vegetation

## Proposed Activity Area 2

### Northern Eucalypt Patch

This small patch of remnant vegetation is fenced and a number of good quality canopy Eucalypts remain with a pasture understory and limited weeds. Here, infill planting of understorey species is proposed to enhance overall vegetation condition.

Improving the vegetation condition of this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Conduct weed control in Year 1
- Undertake infill planting of understorey species in Year 2

**Size:** 0.36 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** Weed control to be funded through Cradle Coast NRM's *Our Natural Advantage* project, Infill planting TBD.

*This area has been included in the baseline vegetation account with AFN.*



3D photogrammetry (drone captured) of proposed activity area 2



Drone captured photo of proposed activity area 2

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score



Align with TIA Strategic Plan 2026 to 2031



# Remnant Vegetation

## Proposed Activity Area 3

### Gully Vegetation North of Dairy

This is a lovely patch of mature wet Eucalypt forest and steep gullies of fern and large blackwoods. There is a large Oak tree on the side of the farm road which has spread seedlings into one gully which needs controlling and small areas of encroaching blackberry and small hawthorns.

Improving the vegetation condition of this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Prioritise weed control in Year 1 and maintain fencing integrity
- Continue targeted weed control for 5+ years (TDRF staff)

**Size:** 3.32 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** Weed control will be funded in Year 1 and 2 by Cradle Coast NRM's *Our Natural Advantage* project.

*This area has been included in the baseline vegetation account with AFN.*



Map of proposed activity area 3



Drone captured photo of proposed activity area 3

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage ✓

Increased co-benefits of natural capital on farms ✓

Align with Australian Dairy Sustainability Framework ✓

Improved vegetation condition / Econd Score ✓

Align with TIA Strategic Plan 2026 to 2031 ✓

# Remnant Vegetation

## Proposed Activity Area 4

### Remnant and Revegetation Adjacent Lower Dam

This area consists of some large mature Eucalypts and a ferny understorey adjacent to dam, including some well-established revegetation. Patches of heavy blackberry are encroaching on all edges which needs controlling. As with most remnant vegetation patches, this area experiences heavy wallaby browsing and limited vegetation recruitment.

Activities in this area will include weed control to improve vegetation condition. Improving the vegetation condition of this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Prioritise weed control in Year 1 and maintain fencing integrity
- Continue targeted weed control for 5+ years (TDRF staff)

**Size:** 1.138 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** Weed control will be funded by CCNRM in Year 1 and 2 by Cradle Coast NRM's *Our Natural Advantage* project.

*This area has been included in the baseline vegetation account with AFN.*



Vegetation at area 4

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*



*Align with TIA Strategic Plan 2026 to 2031*



# Remnant vegetation

## Proposed Activity Area 5

### South West Mature Eucalypts on Tributary Near Pivot

This site surrounds a creek flowing through the property, with the proposed activities focussing on weed control and site rehabilitation to enhance natural values and co-benefits. The canopy is well established and visually significant, though the understorey is sparse.

The existing native creek line vegetation is impacted upon by minor weed encroachment, particularly of blackberry and pasture species. The area is subject to heavy wallaby grazing, which will create an additional challenge for rehabilitation. The activities at this site will focus on weed control in the upstream section of the area (remnant wet eucalypt communities) followed by infill revegetation with native species.

Improving the vegetation condition of this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Prioritise weed control in Year 1 and ensure fencing is adequately maintained
- Undertake understorey infill planting in Year 2
- Continue ongoing weed control for 5+ years (led by TDRF staff)

**Size:** 1.284 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** Weed control will be funded by CCNRM in Years 1 and 2 through the *Our Natural Advantage* project. Infill planting funding and implementation TBD, ongoing weed control by TDRF staff.

*This area has been included in the baseline vegetation account with AFN.*



*Vegetation surrounding the creek*

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*



*Align with TIA Strategic Plan 2026 to 2031*



# Remnant vegetation

## Proposed Activity Area 6

### Mature Revegetation on Southern Boundary

This area has been revegetated with diverse native species in the last 15 to 20 years, however weed encroachment by blackberry and pine tree species is impacting the quality of the vegetation present. Heavy wallaby browsing is limiting recruitment of understorey and canopy species.

Management of the area through weed control and infill planting will aim to improve long-term resilience of this vegetation community. Improving the vegetation condition of this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Prioritise weed control in Year 1 and ensure fencing is maintained
- Undertake understorey infill planting in Year 2
- Continue ongoing weed control for 5+ years (led by TDRF staff)

**Size:** 1.819 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** Weed control will be funded in Years 1 and 2 by Cradle Coast NRM's *Our Natural Advantage* project. Infill planting funding and implementation TBD, ongoing weed control by TDRF staff.

*This area has been included in the baseline vegetation account with AFN.*



3D photogrammetry (drone captured) of proposed activity area 6



Drone captured photo of proposed activity area 6

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*



*Align with TIA Strategic Plan 2026 to 2031*



# Biodiverse planting

## Proposed Activity Areas 7

### Lower GFC Planting Area

This large area of pasture and rushes with some native vegetation is to be fully revegetated with biodiverse native species. The area sits adjacent to neighbouring good quality remnant vegetation and the lower dam, with some good quality remnant Eucalypt and Blackwood woodland vegetation.

This area is also a tributary to Seabrook Creek, a priority area for the Giant Freshwater Crayfish Recovery Round 2 project delivered by Cradle Coast NRM. This area is ideal for showcasing best-practice dam enhancement, with weed control and revegetation over 2.248 hectares providing co-benefits including improved water quality, decreased water loss through evaporation, and increased vegetation quality and habitat, especially for the threatened Giant Freshwater Crayfish.

Increasing the area of biodiverse native vegetation in this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Undertake weed control in Year 1 and Year 2
- Undertake biodiverse planting in Year 1
- Maintain weed suppression in future years (TDRF staff)

**Size:** 2.24 hectares

**Estimated tCO2:** 903 tons

**Proposed funding source:** Biodiverse planting will be funded by Cradle Coast NRM's *Giant Freshwater Crayfish Recovery Round 2* project. Weed control will be funded by Cradle Coast NRM's *Our Natural Advantage* project.

*This area has been included in the baseline vegetation account with AFN.*



Lower dam

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*



*Align with TIA Strategic Plan 2026 to 2031*



# Biodiverse planting

## Proposed Activity Areas 8

### Upper GFC Planting Area

This is an area that is proposed for significant weed control and revegetation with biodiverse native species. There are some good large blackwoods around the dam and upper gully, as well as man ferns and native bracken. There is a lot of blackberry and Hawthorn spread across the site which needs controlling, as well as heavy wallaby activity. There is potential to undertake controlled burning at this site to reduce heavy weed biomass and then follow up with chemical weed control. There is also significant scope for revegetation with biodiverse native species.

This area is also a tributary to Seabrook Creek which is a priority area for the Giant Freshwater Crayfish Recovery Round 2 project.

Increasing the area of biodiverse native vegetation in this area has the potential to show a certified up-tick in TIA's registered native vegetation account through the Accounting for Nature framework.

#### Key actions:

- Undertake comprehensive weed control of blackberry and hawthorn year 1 and 2
- Manage browsing through fencing
- Undertake staged biodiverse planting in year 2

**Size:** 2.149 hectares

**Estimated tCO2:** 1897 tons

**Proposed funding source:** Biodiverse planting will be funded by Cradle Coast NRM's *Giant Freshwater Crayfish Recovery Round 2* project. Weed control will be funded by Cradle Coast NRM's *Our Natural Advantage* project.

*This area has been included in the baseline vegetation account with AFN.*



Middle dam

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*



*Align with TIA Strategic Plan 2026 to 2031*



# Biodiverse planting

## Proposed Activity Areas 9

### New Dam Enhancement

This is a new recently expanded dam with no surrounding native vegetation. The perimeter has a fenced buffer with good scope for fringing native vegetation. The fenced area is currently pasture grass.

#### Key actions:

- Stock graze down Year 1
- Infill in Year 1 with diverse native seedlings
- Follow-up in fill planting and weed control in Year 2



Drone captured photo of proposed activity area 9

**Size:** 0.82 hectares

**Estimated tCO2:** 590 tons

**Proposed funding source:** Weed control will be funded in Years 1 and 2 by Cradle Coast NRM's Our Natural Advantage project. Infill planting funding and implementation TBD, ongoing weed control by TDRF staff.

*This area has been included in the baseline vegetation account with AFN.*



3D photogrammetry (drone captured) of proposed activity area 9

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score



Align with TIA Strategic Plan 2026 to 2031



# Biodiverse planting

## Proposed Activity Area 10

### Weedy Tributary

This weedy gully connects a small patch of remnant below the old dairy with the top of the newly expanded irrigation dam. The gully needs extensive weed control and presents an opportunity to rehabilitate with native species.

No funding has been secured to proceed with key actions at this stage.

#### Key actions:

- Weed control
- Biodiverse planting
- Fencing off the area from stock on both side

**Size:** 0.63 hectares

**Estimated tCO2:** 455 tons

**Proposed funding source:** TBD

*This area has been included in the baseline vegetation account with AFN.*



*Looking down over area 10*



*Drone captured photo of proposed activity area 10*

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*



*Align with TIA Strategic Plan 2026 to 2031*



# Shelterbelts

## Proposed Activity Area 11

### Western Boundary Shelterbelt

This proposal involves the development of a shelterbelt along the southwestern boundary of the TDRF, comprised of softwood timber species.

The shelterbelt aims to demonstrate the benefits of improve shelter on the farm for stock welfare and pasture improvement while also establishing considering options for diverse incomes through the production of plantation species and carbon sequestration. The scale of the plantation area may not be large enough to meet minimum harvesting requirements or carbon planting requirement for ACCU scheme, though the value it still there as a demonstration and aligns with all of the objections of this demonstration well.

#### Key actions:

- Fence off the area in Year 1
- Plant shelterbelt
- Ongoing weed control and plant maintenance in Year 2

**Size:** 1.1 hectares

**Estimated tCO2:** up to 703 tons

**Proposed funding source:** TBD



Map of proposed activity area 11

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*

*Align with TIA Strategic Plan 2026 to 2031*



# Shelterbelts

## Proposed Activity Area 12

### Boundary to Eucalyptus Viminalis Patch Shelterbelt

This proposal involves the development of a shelterbelt along the southwestern boundary of the TDRF, comprised of softwood timber species.

The shelterbelt aims to demonstrate the benefits of improve shelter on the farm for stock welfare and pasture improvement while also establishing considering options for diverse incomes through the production of plantation species and carbon sequestration. The scale of the plantation area may not be large enough to meet minimum harvesting requirements or carbon planting requirement for ACCU scheme, though the value it still there as a demonstration and aligns with all of the objections of this demonstration well.

#### Key actions:

- Fence off the area
- Plant shelterbelt
- Ongoing weed control and plant maintenance

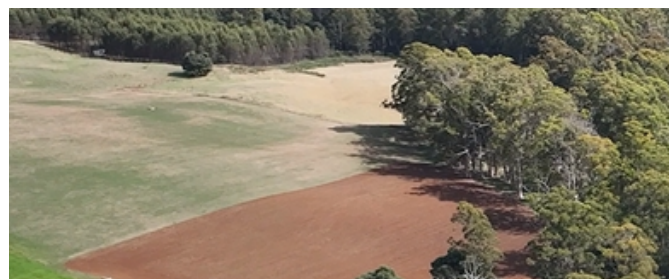
**Size:** 0.28 hectares

**Estimated tCO<sub>2</sub>:** up to 170 tons

**Proposed funding source:** TBD



Map of proposed activity area 12



Drone captured photo of proposed activity area 12

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage ✓

Increased co-benefits of natural capital on farms ✓

Align with Australian Dairy Sustainability Framework ✓

Improved vegetation condition / Econd Score

Align with TIA Strategic Plan 2026 to 2031 ✓

# Shelterbelts

## Proposed Activity Area 13

### Old Dairy Shelterbelt

This location provides an opportunity to establish a new shelterbelt. Establishment of a permanent shelterbelt at this site will create a highly visible example of a well-designed shelterbelt which provides shade and shelter benefits to livestock and pasture species, increased native habitat, and carbon sequestration.

#### Key actions:

- Fence off the area
- Planting the seedlings
- Weed control and maintenance

**Size:** 0.342 hectares

**Estimated tCO2:** 583 tons

**Proposed funding source:** TBD



Map of proposed activity area 13



Drone captured photo of proposed activity area 13

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score

Align with TIA Strategic Plan 2026 to 2031



# Shelterbelts

## Proposed Activity Areas 14 & 15

### Farmhouse Shelterbelts

Similar to activity 13, areas 14 and 15 propose shelterbelts in a highly visible location, located opposite the current dairy in a paddock used ad-hoc for event parking.

The two areas will be located to the north and south of an existing farmhouse, providing carbon sequestration, shelter and shade for stock, diverse income, and increased vegetation coverage on the property.

**Size:** 0.4 hectares

**Estimated tCO<sub>2</sub>:** 113 tons

**Proposed funding source:** TBD



Map of proposed activity areas 14 and 15

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*

*Align with TIA Strategic Plan 2026 to 2031*



# Paddock Trees

## Proposed Activity Area 16

### Paddock Trees by Effluent Pond

A number of mature eucalypts stand within the paddock closest to the farm's effluent ponds, with no fencing or understory vegetation. The benefits of protecting paddock trees within pasture landscapes is well researched, with farm productivity aided through shelter and shade for livestock and pasture, improved soil structure and soil salinity management, increased pollinators as a result of increased habitat, and increased pest control as paddock trees can provide habitat for birds, who then prey on pest insect species.

These unfenced mature eucalypts could do with some fencing and infill to maintain health of the existing trees, while also allowing stock to access shade and shelter from the tree. This action would boost biodiversity and the farm's Econd score while improving resilience of this vegetation asset.

The proposal at this site includes fencing the current trees, in parts or as a whole, and selectively planting some juvenile native tree species, ensuring this stand of trees remains for generations.

#### Key actions:

- Establish fencing to protect root zones and trunk bark
- Initiate targeted planting within fenced areas

**Size:** 0.42 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** TBD

*This area has been included in the baseline vegetation account with AFN.*



*The paddock trees of area 16*

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*

*Align with TIA Strategic Plan 2026 to 2031*



# Paddock trees

## Proposed Activity Area 17

### Paddock Trees Adjacent Eucalyptus Viminalis Patch

This area contains unfenced mature Eucalypts adjacent to good quality *E. viminalis* vegetation. The Eucalypts are large and clearly valued by stock for rubbing and shade, causing damage with wear visible around the base of every tree.

Actions at this site include extending fencing to include these trees, allowing recruitment and vegetation health improvement while preserving shade value for stock.

#### Key actions:

- Establish fencing to protect root zones and trunk bark
- Infill planting of understorey species
- Weed control and plant maintenance

**Size:** 0.52 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** TBD

*This area has been included in the baseline vegetation account with AFN.*



3D photogrammetry (drone captured) of proposed activity area 17



Map of proposed activity area 17

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score



Align with TIA Strategic Plan 2026 to 2031



# Paddock trees

## Proposed Activity Area 18

### Paddock Trees Adjacent Gully Vegetation

Again, a number of beautiful mature Eucalypts stand within this paddock, used by stock for shade and in visibly degrading condition. There is a good opportunity to fence some of these trees off into smaller patches to support resilience and plant some blackwoods to promote spreading shade.

#### Key actions:

- Establish fencing to protect root zones and trunk bark
- Infill planting of understorey species
- Weed control and plant maintenance

**Size:** 0.47 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** TBD

*This area has been included in the baseline vegetation account with AFN.*



3D photogrammetry (drone captured) of proposed activity area 18

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score



Align with TIA Strategic Plan 2026 to 2031



# Agroforestry

## Proposed Activity Area 19

### Agroforestry Near Effluent Dam

This area has been re-fenced, with a steep bank being planting with a mix of wide-spaces trees, with the opportunity for occasional stock grazing beneath.

#### Key actions:

- Re-fence and plant in Year 1
- Continue maintenance in Year 2

**Size:** 1.26 hectares

**Estimated tCO<sub>2</sub>:** N/A

**Proposed funding source:** TBD

*This area has been included in the baseline vegetation account with AFN.*



Map of proposed activity areas 19

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*

*Align with TIA Strategic Plan 2026 to 2031*



# Agroforestry

## Proposed Activity Areas 20-25

Five areas to the south of Nunns Road have been selected as candidates for a wide-spaced agroforestry approach, aiming to provide occasional grazing for calves, dry cows and bulls or to keep stock off high-value pastures during very wet conditions. These areas currently offer lower productivity due to access restrictions, rocks, poor drainage, or lack of irrigation.

This proposed activity also offers diverse farm income streams through plantation timber or the carbon market, including carbon offset options.

### Area 20 - Paddock South of Pivot

**Size:** 6.17 hectares

### Area 21 - Pivot Wedge

**Size:** 3.04 hectares

### Area 22 - Pivot Corner on Nunns Road

**Size:** 7.24 hectares

### Area 23 - Pivot Corner on Murchison Hwy

**Size:** 0.13 hectares

### Area 24 - Steep North-East Plantation

**Size:** 9.81 hectares

### Area 25 - South West Corner

**Size:** 8.82 hectares

**Proposed funding source:** TIA



Map of proposed activity areas 20 to 25

## Industry & Stakeholder Alignment

*Increase or maintain carbon capture & storage*



*Increased co-benefits of natural capital on farms*



*Align with Australian Dairy Sustainability Framework*



*Improved vegetation condition / Econd Score*

*Align with TIA Strategic Plan 2026 to 2031*



# Weed control

## Proposed Activity Area 26

### Main Tributary

This area surrounds the main creek flowing through the property, with the proposed activities focussing on weed control mainly to stop the established weeds from spreading any further into areas of higher value vegetation.

There could be an opportunity to experiment with planting blackwoods within hand-cleared patches of blackberry to see if they may be able to shade out some of weed over the longer-term.

#### Key actions:

- Weed control of outer edges and waterside to reduce the over all weed load and contain
- Plant blackwoods in 1m cleared patches within the blackberry

**Size:** 4.22 hectares

**Estimated tCO2:** N/A

**Proposed funding source:** TIA



Drone captured photo of Main Tributary



3D photogrammetry (drone captured) of proposed activity area 26

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score



Align with TIA Strategic Plan 2026 to 2031



# Weed control

## Proposed Activity Area 27

### Northern Boundary GFC Tributary

This area has some rapidly spreading blackberry and hawthorn which needs to be controlled before it spreads further. The area is close to the creek and other good vegetation on the property. Swift action in this area will reduce the risk of this small weed incursion becoming a much bigger problem.

#### Key actions:

- Fence off the area (old fence has fallen down)
- Weed control year 1 and 2
- Opportunity for infill planting, especially close to the creek

**Size:** 0.32 hectares

**Estimated tCO<sub>2</sub>:** N/A

**Proposed funding source:** Cradle Coast NRM will pay for the weed control for year 1 and 2 through the *Our Natural Advantage* project.



3D photogrammetry (drone captured) of proposed activity area 27

## Industry & Stakeholder Alignment

Increase or maintain carbon capture & storage



Increased co-benefits of natural capital on farms



Align with Australian Dairy Sustainability Framework



Improved vegetation condition / Econd Score



Align with TIA Strategic Plan 2026 to 2031



# Appendix B

Accounting for Nature and Carbon  
Estimation Methodologies



## Accounting for Nature ®

This demonstration is utilising the Accounting for Nature ® (AFN) Framework to measure the biophysical condition of the soil and native vegetation at the TIA Dairy Research Facility through a scientifically rigorous methodology. The AFN Framework is free to be used by any organisation or individual. The Framework also provides an optional paid pathway for interested parties to have their environmental accounts recognised through our Certification. Only users who have had their accounts certified are able to make public and private claims regarding their Environmental Accounts.

This TDRF On-Farm Natural Capital Demonstration is establishing a certified account through the AFN Framework.



The Accounting for Nature Framework has been developed so that it complements other standard and certification systems, such as those for developing carbon offset projects, building and assessing impact investment opportunities (e.g. green bond criteria), pursuing corporate sustainability outcomes and achieving global goals such as the Sustainable Development Goals and Aichi Targets.

It can also be used to underpin and evidence state of nature, impact, risk and opportunity disclosures under the Taskforce on Nature-related Financial Disclosures (TNFD) and is consistent with the United Nation's Standard for Environmental Economic Accounting (SEEA).

## How is carbon estimated?

We utilised the Australian Government's PLANR tool to estimate carbon for project areas. The Platform for Land and Nature Repair (PLANR) is an online geospatial application designed to support landholders participate in the Nature Repair Market Scheme. PLANR offers a range of features to support landholders in planning and developing nature repair projects including tools to assess greenhouse gas emissions, evaluate the condition of their land, track trends in tree and ground cover and estimate the cost of a project.

Estimates of CO<sub>2</sub> refer to the amount of carbon dioxide (CO<sub>2</sub>) that could be sequestered in trees and debris over 25 years under average climate conditions. The estimates are derived by inputting the project areas into the PLANR which utilises a carbon model that is similar to the

Australian Government's Full Carbon Accounting Model (FullCAM).

Vegetation growth is modelled in each 25m x 25m pixel in mapped areas and then averaging the estimates across the modelled pixels. The estimates should be regarded as indicative only.

Actual sequestration rates will vary with management of the regeneration or environmental plantings and climate variability.

Users should note that, in calculating the Australian carbon credit units (ACCUs) generated by ACCU Scheme (previously ERF) projects, the ACCU Scheme model will make deductions for fuel use and fire, and discounts are applied to account for the risk of reversals and permanence. PLANR does not apply any ACCU-related discounts in its tCO<sub>2</sub>e calculations.





Australian Government



Our  
Natural  
Advantage



CRADLE COAST AUTHORITY

This project is supported by the Australian Government through funding from the Natural Heritage Trust under the Climate-Smart Agriculture Program and delivered by Cradle Coast NRM, a member of the Commonwealth Regional Delivery Partners panel in partnership with Tasmanian Institute of Agriculture with support from Dairy Australia and Lactalis - Mainland Dairy.

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Tasmanian Institute of Agriculture



Dairy  
Australia